

Subject Specific Grant Guide

Grants to Support Electric Vehicles and Charging Infrastructure

This guide identifies funding opportunities released in Fiscal Year 2023 which support electric vehicles (EV) and charging infrastructure projects. The opportunities chosen for inclusion in this guide are opportunities that are typically reoccurring.

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FEDERAL GRANT PROFILE



Department: U.S. Department of Agriculture **Agency:** Office of Rural Development

FY 2024 Community Facilities Direct Loan and Grant Program

Grant Overview

This program provides affordable funding to develop essential community facilities in rural areas. Projects supported through this program must demonstrate substantial community support, and facilities must serve the rural area where they are or will be located. Eligible applicants are public bodies, community-based non-profit corporations, and federally recognized tribes.

Program History

	Total Funding	Awards
2023	\$18 million	18

Key Information and Tips

Total Funding: Unspecified Award Range: Varies Match: Not required Application Due: Rolling

• Funds may be combined with commercial financing to finance projects if all eligibility and feasibility requirements are met

https://www.rd.usda.gov/programs-services/community-facilitiesdirect-loan-grant-program



Awardee Profile

North San Joaquin Water Conservation District, CA

AMOUNT: \$1 million YEAR: 2023

Funding will be utilized to make repairs and upgrades to the Irrigation System of North San Joaquin Water District including replace existing pipeline check structures that help with upstream level control, which will incorporate automated gates and flow meters to deliver measured quantities of water to meet customer delivery needs.



Department: U.S. Department of Agriculture **Agency:** Office of Rural Development

FY 2024 Community Facilities Direct Loan and Grant Program

Detailed Summary

The purpose of this program is to provide affordable funding to develop essential community facilities in rural areas. Projects supported through this program must demonstrate substantial community support, and facilities must serve the rural area where they are or will be located. Rural areas must have no more than 20,000 residents according to the latest U.S. Census data, which can be found online at <u>www.census.gov</u>.

For the purposes of this program, an essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area, and does not include private, commercial, or business undertakings. Examples of essential community facilities include:

- Health care facilities such as hospitals, medical clinics, dental clinics, nursing homes, or assisted living facilities
- Public facilities such as town halls, courthouses, airport hangars, or street improvements
- Community support services such as childcare centers, community centers, fairgrounds, or transitional housing
- Public safety services such as fire departments, police stations, prisons, police vehicles, fire trucks, public works vehicles, or equipment
- Educational services such as museums, libraries, or private schools
- Utility services such as telemedicine or distance learning equipment
- Local food systems such as community gardens, food pantries, community kitchens, food banks, food hubs, or greenhouses

Priority will be given to projects that:

- Serve communities with populations of 5,500 or fewer
- Serve low-income communities having a median household income below 80 percent of the state non-metropolitan median household income

Funds may be used to purchase, construct, and/or improve essential community facilities; purchase equipment; and pay for related project expenses. Other items that may be included in a loan include reasonable and necessary fees for:

- Legal
- Architectural and/or engineering
- Fiscal advisors
- Environmental

- Archaeological
- Mitigation measures
- Planning
- Establishing or acquiring right



Applicant Eligibility

Eligible applicants are public bodies, community-based nonprofit corporations, and federally recognized tribes.

Facilities supported through this program must serve the rural area where they are or will be located. Rural areas include cities, villages, townships, and towns, including federally recognized tribal lands, with no more than 20,000 residents according to the latest U.S. Census data, which can be found online at <u>www.census.gov</u>.

Additionally, in order to be eligible, applicants must have the legal authority to borrow money, obtain security, and repay loans; and to construct, operate, and maintain the proposed facilities; and be unable to finance projects from their own resources and/or through commercial credit at reasonable rates and terms.

Funding

In FY 2024 an unspecified amount of funding is available to support grants and low-interest direct loans through this program. Awards may be provided as combinations of grants and loans. Grant assistance is provided on a graduated scale, with smaller communities with the lowest median household income being eligible for projects with a higher proportion of grant funds. Grant assistance is limited to the following percentages of eligible project costs:

- Maximum of 75 percent if:
 - The project is located in a rural community having a population of 5,000 or fewer
 - The median household income of the service area is below the higher of the poverty line or
 60 percent of the state non-metropolitan median household income
- Maximum of 55 percent if:
 - The project is located in a rural community having a population of 12,000 or fewer
 - The median household income of the service area is below the higher of the poverty line or 70 percent of the state non-metropolitan median household income
- Maximum of 35 percent if:
 - The project is located in a rural community having a population of 20,000 or fewer
 - The median household income of the service area is below the higher of the poverty line or 80 percent of the state non-metropolitan median household income
- Maximum of 15 percent if:
 - The project is located in a rural community having a population of 20,000 or fewer
 - The median household income of the service area is below the higher of the poverty line or 90 percent of the state non-metropolitan median household income

Loan repayment terms may not be longer than the useful life of the facility, state statutes, the applicant's authority, or a maximum of 40 years, whichever is less. There will be no prepayment penalties. Interest rates will be set by the funding agency and are determined by the median household income of the service area. Once the loan is approved, the interest rate is fixed for the entire term of the loan. Current interest rates can be found online at www.rd.usda.gov/programs-services.

Matching and Cost-Share

There are no stated matching requirements for this program.



Contact Information

Questions should be directed to the appropriate local office listed online at <u>www.rd.usda.gov/contact-</u> <u>us/state-offices</u>. To initiate the application process, applicants must contact the appropriate local office.

https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program

FEDERAL GRANT PROFILE



Department: U.S. Department of Energy **Agency:** Office of Manufacturing and Energy Supply Chains

FY 2024 Battery Materials Processing and Battery Manufacturing Program

Grant Overview

This program will strengthen critical domestic manufacturing and supply chains to maximize the benefits of the clean energy transition as the nation works to curb the climate crisis and advance environmental justice. Eligible applicants are individuals, institutions of higher education, national laboratories, nonprofit and for-profit entities, state and local governments; and consortia of entities described above.

Program History

	Total Funding	# of Awards
2022	\$2.8 billion	21

Key Information

Total Funding: \$3.5 billion Award Range: Up to \$500 million Match: 50 percent Solicitation date: November 15, 2023 Proposal due: July 9, 2024 (concept paper); March 19, 2024 (full application)

https://infrastructure-

exchange.energy.gov/Default.aspx#Foalda8b13027-1ca4-42f3-a18e-8072624b2acb



Awardee Profile

6K, Inc., Southeastern US

amount: \$50,000,000 year: 2022

6K Inc. plans to demonstrate the ability to domestically produce multiple battery chemistries namely NMC811 and lithium iron phosphate (LFP) in a plant with the capacity of 3,000 tpa (tonnes per annum) ready for production in 2025 scaling to 10,000 tpa in 2026 using its patented 6K's UniMelt® microwave plasma processing technology. Community benefits include employing a workforce of up to 150 (40% coming from disadvantaged communities)



Department: U.S. Department of Energy **Agency:** Office of Manufacturing and Energy Supply Chains

FY 2024 Battery Materials Processing and Battery Manufacturing Program

Detailed Summary

The purpose of this program is to strengthen critical domestic manufacturing and supply chains to maximize the benefits of the clean energy transition as the nation works to curb the climate crisis and advance environmental justice.

This program has 8 specific areas of interest:

- 1. <u>Commercial-scale Lithium Separation from Domestic Sources</u>
 - a) Domestic Brine Sources: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. battery-grade Lithium manufacturing capacity from domestic brine as a supply source capable of use in electric vehicles and/or electric grid energy storage applications.
 - b) Domestic Hard Rock and Clay Source: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. battery-grade Lithium manufacturing capacity from domestic hard rock and clay sources capable of use in electric vehicles and/or electric grid energy storage applications
- 2. Commercial-scale Domestic Recovery of Battery Critical Minerals (non-Lithium)
 - a) From Traditional Sources: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. battery-grade non-lithium critical materials manufacturing capacity from traditional sources (natural occurrences including hard rock and brine, mine tailings, chemical process solutions, and battery recycling sources, etc.) capable of use in electric vehicles and/or electric grid energy storage applications.
 - b) From Alternative Sources: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. battery-grade non-lithium critical materials manufacturing capacity from alternative sources (mine waste, mineral substitutes, other waste and non-battery recycling streams, etc.) capable of use in electric vehicles and/or electric grid energy storage applications
- 3. Commercial-scale Domestic Processing of Battery Material Precursors
 - a) Commercial-scale Domestic Processing of Battery Material Precursors: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create a U.S. battery-grade battery material precursor manufacturing capacity capable of use in electric vehicles and/or electric grid energy storage applications. Relevant battery material precursors would be those that feed directly to into downstream electrode active material powders and battery manufacturing and may include silane gas and cathode active material precursors, among others
- 4. Commercial-scale Domestic Manufacturing of Battery Cathodes and Anodes

- a) Commercial-scale Domestic Production of Battery Cathodes: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create a U.S. battery-grade cathode manufacturing capacity capable of use in electric vehicles and/or electric grid energy storage applications.
- b) Commercial-scale Domestic Production of Battery Anodes: The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create a U.S. battery-grade anode manufacturing capacity capable of use in electric vehicles and/or electric grid energy storage applications.
- 5. <u>Commercial-scale Domestic Production of Electrolyte Salts and Electrolyte Solvents</u>
 - a) Commercial-scale Domestic Production of Battery Electrolyte Salts The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. battery-grade electrolyte salt manufacturing capacity capable of use in electric vehicles and/or electric grid energy storage applications
 - b) Commercial-scale Domestic Production of Battery Electrolyte Solvents The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit facilities to create U.S. battery-grade electrolyte solvent manufacturing capacity capable of use in electric vehicles and/or electric grid energy storage applications.
- 6. <u>Commercial-scale Domestic Production of Cell Manufacturing for Small and Specialized Markets</u>
 - a) Commercial-scale Domestic Production of Cell Manufacturing for Small and Specialized Markets The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. cell manufacturing capacity for (1) non-light duty transportation and stationary storage as well as well as for (2) small and specialized markets such as commercial and off-road vehicles, defense, aerospace, power tools, and other end-use markets.
- 7. Commercial-scale Domestic Production of Non-Lithium Based Battery Cell and Systems
 - a) Commercial-scale Domestic Production of Non-Lithium Based Battery Cell and Systems The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. Non-Lithium Based Battery Cell and Systems capacity.
- 8. <u>Commercial-scale Domestic Manufacturing of Other Battery Cell and System Components (Open</u> <u>Topic)</u>
 - a) Commercial-scale Domestic Manufacturing of Other Battery Cell and System Components (Open Topic) The objective of this area of interest is to construct new commercial scale facilities or expand, retool, or retrofit existing facilities to create U.S. manufacturing capacity for other battery cell and system components (components not addressed in other areas of interest).

DOE will prioritize projects that create work opportunities for workers of low and moderate income, rural communities, and in communities that have lost or are at risk of losing jobs due to displacement of fossil energy jobs, including in the automotive sector. DOE will also prioritize projects that include clear engagement with Tribal Nations, universities, and laboratories. Commitments toward these goals should be clearly identified in the Quality Jobs, diversity, equity, inclusion, and accessibility (DEIA), Justice40, and community and labor engagement sections of the Community Benefits Plan. Within the Community Benefits Plan, the applicant is strongly encouraged to provide details on how to ensure the delivery of measurable community and jobs benefits, detailing plans to negotiate agreements between the applicant and community stakeholders, and/or the applicant and labor unions referred to collectively here as "Workforce and



Community Agreements." These include collective bargaining agreements, project labor agreements, community workforce agreements, good neighbor agreements, community benefits agreements, and others

Applicant Eligibility

Eligible applicants for this program include:

- 1. <u>Individuals</u>: U.S. citizens and lawful permanent residents are eligible to apply for funding as a prime recipient or subrecipient.
- <u>Domestic Entities</u>: The proposed prime recipient and subrecipient(s) must be domestic entities. The following types of domestic entities are eligible to participate as a prime recipient or subrecipient include: Institutions of higher education; National Laboratories; Nonprofit and for-profit entities; State and local governments; and Consortia of entities described above.
 - a. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.
 - NETL (National Energy Technology Laboratory) is not eligible for award under this announcement and may not be proposed as a subrecipient on another entity's application. An application that includes NETL as a prime recipient or subrecipient will not be considered.
 - c. Entities banned from doing business with the U.S. government, such as entities debarred, suspended, or otherwise excluded from or ineligible for participating in federal programs, are not eligible.
 - d. Nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.
- 3. <u>Foreign Entities</u>: In limited circumstances, DOE may approve a waiver to allow a foreign entity to participate as a prime recipient or subrecipient. A foreign entity may submit a Full Application to this FOA, but the Full Application must be accompanied by an explicit written waiver request. Likewise, if the applicant seeks to include a foreign entity as a subrecipient, the applicant must submit a separate explicit written waiver request in the Full Application for each proposed foreign subrecipient.

Funding

In FY 2024, approximately \$3.1 billion is available to support an estimated 7-14 awards ranging from \$50 million-\$400 million through this program. 40 percent of total program funds are reserved for disadvantaged communities. Funding for specific topic areas and statutory minimum and maximum award amounts can be found on pp. 18-19 of the <u>FOA</u>.



Cost Share and Matching Funds

Applicant cost share (coming from private capital) must be at least 50% of the total project costs for demonstration or commercial application projects. The cost share must come from non-federal sources, unless otherwise allowed by law.

Contact Information

Program Staff DE-FOA-0002678@netl.doe.gov

https://eere-exchange.energy.gov/Default.aspx#Foaldc53b6390-dfb8-480a-9265-3ffdec6c97b3

FEDERAL GRANT PROFILE



Department: U.S. Department of Energy **Agency:** Office of Energy and Transportation

FY 2023 Bipartisan Infrastructure Law (BIL) Joint Office of Energy and Transportation Ride and Drive Electric Program

Grant Overview

This program will address discrete barriers to a future where everyone can ride and drive electric. Specifically, this program will advance the goal of building a national network of EV chargers for all Americans by supporting EV charging reliability, resiliency, equity, and workforce development. Enhancing and expanding EV infrastructure nationwide will also indirectly contribute to the goal of having 50 percent of all new light-duty vehicle sales be electric by 2030. Eligible applicants are domestic institutions of higher education, forprofit entities, nonprofit entities, state and local governmental entities, and Indian tribes.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: \$51 million Award Range: \$250,000 - \$4 million Match: Varies Proposal due: June 16, 2023 (Concept Papers), July 28, 2023 (Full Application)

https://eere-

exchange.energy.gov/Default.aspx#Foald0b80a42a-5380-4459-96a9-f333002ea9b0



Tips

- Teaming partnerships are highly recommended.
- Applicants are encouraged to submit Community and Labor Partnership Documentation from established labor and community-based organizations that demonstrate the applicant's ability to achieve the goals outlined in a Community Benefits Plan.

Department: U.S. Department of Energy **Agency:** Office of Energy and Transportation

FY 2023 Bipartisan Infrastructure Law (BIL) Joint Office of Energy and Transportation Ride and Drive Electric Program

Detailed Summary

The purpose of this program is to address discrete barriers to a future where everyone can ride and drive electric. Specifically, this program will advance the goal of building a national network of EV chargers for all Americans by supporting EV charging reliability, resiliency, equity, and workforce development. Enhancing and expanding EV infrastructure nationwide will also indirectly contribute to the goal of having 50 percent of all new light-duty vehicle sales be electric by 2030. Specific program topic areas are as follows:

<u>Topic Area 1: Enhancing EV Charging Resiliency</u>: This topic will establish and fund a cohort of diverse teams from across the United States to develop, share, and refine specific and actionable plans and strategies that ensure continuity of operations and services of EV charging infrastructure for all EV users in a given region. Plans developed in these projects will enhance ongoing federal investments in EV charging and transportation electrification – including the Federal Highway Administration (FHWA) National Electric Vehicle Infrastructure (NEVI) and Charging and Fueling Infrastructure (CFI) Discretionary Grant Programs, Federal Transit Administration's Low or No Emissions Transit Program, and Environmental Protection Agency's Clean School Bus Program – as well as complementary or similar investments at the state and local levels.

Project teams are encouraged to include state, regional, Tribal, and local authorities having jurisdiction (AHJ) concerning resiliency and emergency operations (e.g., emergency management, transportation or energy departments, electric utilities, utility regulators, planning organizations, transit and public mobility service providers, sustainability, or climate offices) and charging station operators.

<u>Topic Area 2A: Community-Driven Models for Electric Vehicle Charging Deployment</u>: The objective of this topic is to fund projects that will assess, develop, and/or test business models that integrate EV and/or charger deployment in ways that deliver mobility, economic, or other benefits to Justice40 and underserved communities. Projects can be some combination of an analysis, business model development, or limited scale pilot/deployment to provide proof of concept. The project may include limited test EV charger deployments (Level 2 or DCFC) to test business models, capped at 50 percent of total project budget. Test deployment projects should be designed to inform further deployment of EV chargers and associated mobility systems funded by other taxpayer or ratepayer funding, including federal grant programs and tax incentives. The funding agency is interested in business models that benefit targeted communities by, for instance:

- Increasing revenue to local adjacent businesses (particularly small or independent businesses)
- Reducing costs by leveraging a dig-once approach for multi-modal hubs
- Creating good job opportunities, including unionized job opportunities
- Increasing clean mobility options for carless households and individuals, especially options that improve access to employment, health care, child-care, and other social services

- Providing affordable, reliable access to EV charging infrastructure
- Training community organizations and businesses in best practices for acquiring, installing, maintaining, and monetizing EV chargers
- Reducing charging costs by capturing value that EVs provide through grid services
- Integrating electric mobility with the delivery of other critical services for community members
- Leveraging partnerships with established organizations, such as community development corporations and affordable housing entities, that provide services to disadvantaged community members

Application teams are strongly encouraged to include active participation by community-oriented organizations, community-based organizations or other entities that play critical roles in communities.

<u>Topic Area 2B: Workforce Development</u>: The objective of this topic is to support a diverse and highly skilled workforce within the electrified transportation industry to support the deployment and maintenance of EV charging related equipment including equipment that will be supported by the FHWA NEVI and CFI grant programs. The key outcome of interest is expanded access to career-track training and employment in EVSE installation and maintenance work for a diversified pipeline of individuals. Strategies for achieving this goal include but are not limited to:

- Investments in existing pre-apprenticeship programs and/or other pre-employment training programs, including expansion of supportive services that will make it more likely to graduate underrepresented populations
- Funding of tuition or program costs for training programs that show a history of leading people into careers or registered apprenticeship that can be scaled
- Creation of new pathways into registered apprenticeships, including pathways conducted in partnership with registered apprenticeship sponsors
- Provision of stipends that will help people to thrive in training programs
- Supportive services for registered apprentices and/or those enrolled in other preemployment training programs to help expand access to jobs, especially those in underserved communities
- Development of competency frameworks needed for maintenance of EV chargers with relevant partners including transportation entities, industry associations, training providers, and labor organizations
- Development of a registered apprenticeship program approved by the U.S. Department of Labor that focuses on EV charger maintenance
- Scaling curriculum or training programs that have been proven to meet industry needs for maintenance of chargers
- Modifying existing training programs to better meet maintenance needs. This would include an
 assessment of the differences between competencies required for existing credentials and
 competencies desired by industry to meet EV charging reliability needs and the curriculum or
 coursework proposed to address these differences.

Projects selected under this Topic Area will be demand-driven and worker-centric, leverage existing infrastructure and resources, be sustainable and replicable, and prioritize energy justice issues. Projects will employ data-driven strategies to quantify their impacts (such as placement and retention rates of training graduates) and document best practices for diversifying a skilled workforce.

<u>Topic Area 3A: Increasing Commercial Capacity for Testing and Certification of HighPower Electric Vehicle</u> <u>Chargers</u>: The objective of this Topic is to increase industrial capacity, competition, redundancy, and broad access to validation testing and certification in the United States of DC fast chargers with rated power capacity between 150 kW and 1 MW. Applications for projects are requested to rapidly increase commercial testing capacity and capabilities necessary to validate, improve, and certify the efficiency, safety, security, interoperability, measurement accuracy, and longevity of high-power DC fast chargers. Activities of interest include:

- Upgrades to independent commercial testing facilities
- Development of new, low-cost tools that test and certify equipment conformance to standards and performance requirements
- Creation and maintenance of open-source libraries of conformance test cases and procedures;
- Creation and documentation of systems and procedures for testing charging devices to failure across a wide range of real-world conditions
- Other innovative approaches to certify and validate DC fast charging equipment performance

Project teams are encouraged to include nationally recognized testing laboratories, DC fast charger manufacturers, charging station operators, charging network providers, labor groups including unions, EV manufacturers, and/or other organizations currently involved in the development of certification testing resources for the standards, protocols, and procedures above.

<u>Topic Area 3B</u>: The objective of this Topic is to establish teams to assess the performance, reliability, and usability of AC Level 2 charging and/or DC fast charging (DCFC) stations across the United States. The teams will develop a scalable, in-field methodology to assess AC Level 2 and/or DCFC performance, reliability, and customer experience. The teams will then use that methodology to conduct field assessments of AC Level 2 and/or DCFC charging performance and reliability by periodically visiting a statistically significant sample of charging stations operated by numerous charging station operators. Teams will be required to develop and execute a training program for states. In this program, the teams will teach state officials how to conduct their own field assessments of AC Level 2 and/or DCFC charging performance and reliability, using a single, nationally consistent methodology. This training program will include curriculum on procedures and tools necessary to measure AC Level 2 and/or DCFC charging metering accuracy and meet any other requirements related to weights and measures, as defined in NIST Handbook 44 Device Code Requirements for Electric Vehicle Fueling.

There are no required teaming arrangements. Proposed project teams may consist of a single organization. Project teams that are regionally distributed are encouraged to reduce travel expenses. Project teams are encouraged to include one or more state departments of transportation, state departments responsible for weighing and measuring devices, and state utilities commissions and energy offices to assist in the development and validation of the state training program.

To support the goal of building a clean and equitable energy economy, projects are expected to:

- Support meaningful community and labor engagement
- Invest in America's workforce
- Advance diversity, equity, inclusion, and accessibility (DEIA)
- Contribute to the President's goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative).

Applicant Eligibility

Eligible applicants are domestic institutions of higher education, for-profit entities, nonprofit entities, state and local governmental entities, and Indian tribes. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Funding

In FY 2023, approximately \$51 million is available to support between 24 and 40 awards ranging from \$250,000-\$4 million. Specific funding amounts for each topic area is as follows:

- <u>Topic Area 1: Enhancing EV Charging Resiliency</u>: an estimated \$17 million is available to support 10-15 awards ranging from \$1 million to \$1.5 million through this topic area. The project period is 24 months.
- <u>Topic Area 2A: Community-Driven Models for Electric Vehicle Charging Deployment</u>: an estimated \$10 million is available to support 5-8 awards ranging from \$250,000 million to \$1.5 million through this topic area. The project period is 24 months.
- <u>Topic Area 2B: Workforce Development</u>: an estimated \$10 million is available to support 5-10 awards ranging from \$1 million to \$1.5 million through this topic area. The project period is 24 months.
- <u>Topic Area 3A: Increasing Commercial Capacity for Testing and Certification of HighPower Electric</u> <u>Vehicle Chargers</u>: an estimated \$6 million is available to support 2-3 awards ranging from \$2 million to \$3 million through this topic area. The project period is 24 months.
- <u>Topic Area 3B</u>: Validating Public EV Charging Infrastructure Real World Performance and Reliability: an estimated \$8 million is available to support 2-4 awards ranging from \$2 million to \$4 million through this topic area. The project period is 30 months.

Matching and Cost Share

Cost share requirements for each topic areas are as follows:

- <u>Topic 1</u>: The cost share must be at least 20% of the total project costs. The cost share must come from non-federal sources unless otherwise allowed by law.
- <u>Topic 2A:</u> Cost Share Cost share may vary by activity. Non-deployment activities have a 0 percent cost share requirement, while deployment activities will require 50 percent. Deployment costs must not exceed 50% of total project costs. The cost share must come from non-federal sources unless otherwise allowed by law.
- <u>Topic 2B:</u> Cost share not required.
- <u>Topic 3A:</u> The cost share must be at least 50 percent of the total project. The cost share must come from non-federal sources unless otherwise allowed by law.
- <u>Topic 3B:</u> Cost share not required.

Contact Information

Program Staff <u>DE-FOA-0002881@netl.doe.gov</u> Ride and Drive Electric Program

https://eere-exchange.energy.gov/Default.aspx#Foald0b80a42a-5380-4459-96a9-f333002ea9b0

FEDERAL GRANT PROFILE



Department: U.S. Department of Energy **Agency:** National Renewable Energy Laboratory (NREL)

FY 2023 Clean Energy to Communities Program: Peer-Learning Cohorts

Grant Overview

The purpose of this program is to create a platform for peerlearning cohorts to address cross-cutting energy challenges with a community-oriented approach. Participants in the cohorts will meet regularly to share strategies and best practices, learn collaboratively, and work on policy or program proposals, action plans, or strategies to tackle energy-related issues. Eligible applicants include local governments, tribal governments, metropolitan planning organizations, utilities, community-based organizations, regional planning organizations, and other public entities such as transit agencies, school districts, and housing authorities.

Program History

For the first round of FY2023 funding, 14-15 participants per cohort were selected to participate in one of the three peer-learning cohorts.

Key Information

Total Funding: Unspecified Award Range: Unspecified Match: None Solicitation date: March 30, 2023 Proposal due: May 8, 2023

https://www.nrel.gov/state-local-tribal/c2c-peer-learningcohorts.html?utm_medium=print&utm_source=state-localtribal&utm_campaign=cohorts



Tips

- Applicants currently receiving support from other U.S. Department of Energy programs are eligible to apply; however, priority may be given to applicants that have not received, or are not currently receiving, support from the U.S. Department of Energy.
- Applicants may apply for up to two cohorts in a single cohort cycle.
- Applicants that have already been selected to participate in a cohort under this program are eligible to apply.

Department: U.S. Department of Energy **Agency:** National Renewable Energy Laboratory (NREL)

FY 2023 Clean Energy to Communities Program: Peer-Learning Cohorts

Detailed Summary

The purpose of this program is to provide an opportunity for participation in peer-learning cohorts that will address cross-cutting energy challenges with a community-centered focus. Each peer-learning cohort will convene regularly to exchange strategies and best practices, learn in a collaborative environment, and workshop policy or program proposals, action plans, or strategies to overcome challenges around a common clean energy transition topic. Rather than providing monetary awards, this program will provide technical assistance provided by lab experts to cohorts, including education, case studies, analysis and modeling tools, templates, trainings, and facilitated collaboration to enable accelerated clean energy progress. This program is intended to bring together communities with similar clean energy goals, opportunities, or challenges to:

- Gain insights that will help them access upcoming funding or programmatic opportunities
- Learn from subject matter experts, who will provide education, best practices, analysis tools, templates, and other resources as needed
- Exchange case studies, experiences, and insights with other communities that can inform their own activities
- Develop proposals, action plans, and strategies to overcome common challenges and enable accelerated clean energy progress

For this solicitation, the program consists of three peer-learning cohorts that address the following topics:

- <u>Planning and funding for electric vehicle (EV) charging infrastructure deployment:</u> This cohort will support participants to proactively plan equitable EV infrastructure, prioritize strategies, and prepare to pursue available federal funding for implementation. Key topics may include:
 - a. Identifying the role of communities in meeting current and future demand for EV charging infrastructure
 - b. Planning, permitting, and zoning best practices for EV charging infrastructure
 - c. Funding and financing opportunities to support deployment of EV charging infrastructure
 - d. Understanding best practices for identifying community partners, conducting engagement, and ensuring equitable outcomes
 - e. Contracting with an EV charging provider
 - f. Developing fee structures for operations and maintenance of EV charging stations
- Implementing a municipal clean energy procurement strategy: This cohort will guide participants that have prioritized potential sites for clean energy development through the process of developing a request for proposal (RFP), incorporating equity criteria and community benefits into procurement, soliciting bids, negotiating contracts, and implementing the project. Key topics may include:
 - a. Understanding clean energy procurement processes, best practices, ownership models, and financing structures

Clean Energy to Communities (C2C) Program: Peer-Learning Pilot Cohorts

- b. Utilizing available tools and resources to ensure optimal project scale and performance
- c. Incorporating equity criteria and community benefits into procurement processes
- d. Developing an RFP and soliciting bids from consultants and developers
- e. Identifying federal incentives and awards that will lower the cost of a clean energy project
- 3. <u>Incorporating community voices in clean energy planning and deployment:</u> This cohort will support participants to adopt stakeholder and community engagement best practices and strategies to authentically include community voices in planning processes. Key topics may include:
 - a. Understanding what authentic, inclusive, and equitable engagement looks like for clean energy planning
 - b. Identifying community engagement methods and keys for success
 - c. Developing facilitation and communication strategies to help a group constructively respond to conflict or disagreement
 - d. Promoting transparency and accountability in the planning process and beyond
 - e. Refining and implementing engagement plans

Applicant Eligibility

Eligible primary applicants are entities that have decision-making power or influence in their community but need access to additional clean energy expertise to inform upcoming opportunities. In general, eligible primary applicants include tribal governments; local governments, including city, town, or county governments; metropolitan planning organizations; regional planning organizations; utilities; communitybased organizations; and other public entities, such as transit agencies, school districts, and housing authorities. Each cohort is estimated to consist of 8 to 15 communities; however, in some cases, cohorts may be larger or smaller.

Specifically, eligible primary applicants for each peer-learning cohort are as follows:

- <u>Planning and funding for electric vehicle (EV) charging infrastructure deployment</u>: eligible primary applicants are city, town, or county governments; tribal governments; municipal utilities; and metropolitan and regional planning organizations
- <u>Implementing a municipal clean energy procurement strategy</u>: eligible primary applicants are city, town, or county governments; tribal governments; and other public entities, including transit agencies, school districts, and housing authorities.
- <u>Incorporating community voices in clean energy planning and deployment</u>: eligible primary applicants are city, town, or county governments; tribal governments; utilities; metropolitan and regional planning organizations; and community-based organizations currently partnering with governmental entities to support clean energy planning.

Depending on the cohort topic focus, primary applicants may benefit from including secondary partners, such as electric utilities, community-based organizations, Clean Cities coalitions, and other public agencies, on their application, especially partners that may play a significant role in planning, decision-making processes, and implementation efforts.

For the peer-learning cohort regarding planning and funding for EV charging infrastructure deployment, applicants are encouraged to apply in partnership with their local or regional Clean Cities coalition. A database of Clean Cities coalitions can be found online at cleancities.energy.gov.

All applicants must indicate a primary community representative, which must be a member of the applicant organization.

Funding

Rather than providing monetary awards, this program will provide an opportunity for participation in three peer-learning cohorts regarding clean energy. Each peer-learning cohort will convene regularly to exchange strategies and best practices, learn in a collaborative environment, and workshop policy or program proposals, action plans, or strategies to overcome challenges around a common clean energy transition topic. This program will provide technical assistance provided by lab experts to cohorts, including education, case studies, analysis and modeling tools, templates, trainings, and facilitated collaboration to enable accelerated clean energy progress.

Participant communities will be selected and notified on approximately June 1, 2023. Cohorts will launch in July 2023. Each cohort is anticipated to last approximately six months on average; however, cohorts may be shorter or longer depending on the content and time needed to effectively meet participant needs. Each community representative is anticipated to commit approximately four hours per month for each cohort, including participation in sessions, limited one-on-one technical assistance, and individual work between sessions.

Contact Information

Program Staff C2C@nrel.gov

https://www.nrel.gov/state-local-tribal/c2c-peer-learningcohorts.html?utm_medium=print&utm_source=state-local-tribal&utm_campaign=cohorts_

FEDERAL GRANT PROFILE



Department: U.S. Department of Energy **Agency:** Office of Clean Energy Demonstrations

FY 2023 Distributed Energy Systems Demonstrations Program

Grant Overview

The purpose of this program is to help the U.S. develop more reliable, resilient, and cost-effective energy systems to better support our rapidly changing electric grid and the growth of electric vehicles (EV), energy storage, and the electrification of buildings and industry. Eligible prime recipients include utilities, including municipal, cooperative, and investor-owned utilities; and for-profit entities currently engaged in grid service provision via an established portfolio of aggregated distributed energy resources.

Program History

This is a *new* program established through the 2023 Consolidated Appropriations Act.

Key Information

Total Funding: Approximately \$50 million Award Range: \$10 million to \$25 million Match: 50 percent Proposal due: November 16, 2023 (Concept Papers), February 29, 2024 (Full Applications).

https://www.energy.gov/oced/distributed-energy-systemsdemonstrations-program



Tips

- All distributed energy resources and technologies included in a project should be TRL 7-9.
- The funding agency is compiling a "Teaming Partner List" to facilitate the formation of new project teams for this program. The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships.

Department: U.S. Department of Energy **Agency:** Office of Clean Energy Demonstrations

FY 2023 Distributed Energy Systems Demonstrations Program

Detailed Summary

The purpose of this program is to support transformative at-scale projects within distribution systems that demonstrate approaches to integrate grid-edge renewable and distributed energy systems into broader energy networks. These projects will seek to demonstrate reliable operations and system-wide value in the context of distribution grids with high levels of variable as well as non-dispatchable renewable generation and flexible load assets. The program goal is to build confidence that the design, control, and compensation approaches developed can be readily applied to other portions of the distribution grid and extended to other mixes of distributed energy resources (DERs), potentially extending the value of this approach to a more diverse set of communities, individuals, and entities as the distribution system continues to change.

Projects should accomplish the maximum practicable number of the following objectives:

- Demonstrate reliable operations and financial value of distribution grids that leverage high levels of variable renewable generation and flexible load assets to the distribution grid operators and endusers
- Demonstrate interoperability and coordinated control of generation, grid, storage, transportation, industrial and/or building energy systems.
- Demonstrate reliable grid service provision from diverse DER mixes and grid configurations.
- Support the development of best practices for planning, execution, and operation of similar projects.
- Ensure sharing of best practices and key learnings on grid reliability at high levels of penetration utilizing diverse asset mixes with system operators to ensure replicability and extensibility of control approaches.
- Share electricity usage and system performance data with relevant communities (geographic communities and communities of practice) to accelerate adoption and replication of successful solutions.
- Integrate with and expand grid operator training programs.
- Accelerate the incorporation of these solutions into utility planning processes.
- Reduce the cost of capital for implementation of similar, subsequent projects.
- Reduce barriers to participation and access to grid service financial value for a diverse group of energy asset owners and disadvantaged communities (DAC).
- Engage in providing grid services to Independent System Operators/Regional Transmission Organizations (ISO/RTO) through FERC Order 2222.

The funding agency anticipates that funds will support primarily system planning, enhancements to sensing, communications and control infrastructure, control software, and sustained operational demonstrations, with a limited portion of funds supporting direct deployment or implementation of distributed energy assets.

Eligible projects must meet the following grid system requirements and cost considerations:

Distributed Energy Systems Demonstrations Program

- All projects must utilize a distribution grid with at least 20MW peak load for the demonstration.
- All projects must utilize distributed energy resources (excluding distributed generation) with an aggregated capacity of at least 25% of the grid system peak load.
- All projects must have at least 50% of distributed energy resources in place and/or enrolled at the application stage.
- Every project team must include a distribution grid operator, either as prime recipient or as a subrecipient

Projects are encouraged to utilize a variety of DERs including but not limited to:

- Distributed generation
- Stationary energy storage
- Electric vehicles
- Flexible Building loads
- Industrial facility loads
- Sensing, communication, and control systems assets
- Advanced grid electronics

Applicants may utilize some or all of the DERs and associated technologies and systems listed above, may utilize existing aggregation programs, and may target a range of services and value propositions depending on grid conditions and community needs. All DERs and technologies included in the project should be TRL 7-9.

In general, the program is seeking proposals that demonstrate service provision from the aggregated system, rather than from a single asset within the system. Example metrics and services include:

- Capacity services
- Demand reduction
- Energy shifting
- Reliability services, including volt/VAR and frequency support
- Congestions and curtailment reductions
- Emissions reductions
- Electricity cost reductions
- Curtailment reduction
- Blackstart capability
- Outage ride-through
- Outage frequency and duration reduction
- Voltage/VAR support

Projects under this program will be funded through four distinct phases:

• Phase 1 - Detailed Planning: Phase 1 activities will focus on completing specific details about the overall project plan and analysis to refine projections submitted as part of the proposal. These activities must provide assurance to DOE that the overall project plan is technologically, financially, and legally viable, with buy-in from relevant local and community stakeholders. This could include any plans to develop a skilled labor pool and provide community benefits through Workforce and Community Agreements. Teams will complete preliminary engineering, construction, and commercial-scale designs.

Distributed Energy Systems Demonstrations Program

- Phase 2 Project Development, Permitting, and Financing: Phase 2 encompasses advanced planning activities. Recipients will finalize their project development plans, commercial agreements, financial structure, and complete the necessary permitting and approval activities required to begin construction. Long-lead procurement activities may be started in Phase 2 with prior DOE approval. All distributed energy asset recruitment and enrollment activities should be completed. By the completion of Phase 2, safety and security plans should be finalized and execution ready. All necessary permits and approvals should be in place to prepare for construction, including completion of required NEPA reviews and regulatory approvals.
- Phase 3 Installation, Integration, and Construction: During Phase 3, recipients will continue to implement their community benefits plans and provide ongoing mechanisms for community and labor input that will support the realization of meaningful benefits and minimization of any project negative impacts.
- Phase 4 Ramp-Up and Sustained Operations: Phase 4 activities will focus on integrated system
 performance and ramp-up. By the end of Phase 4, each award will have demonstrated fully functional
 operations over an extended period. For this program, it is anticipated that Phase 4 will have a
 minimum duration of 3 years and may extend as long as 5 years.

Applicant Eligibility

Eligible prime recipients include utilities, including municipal, cooperative, and investor-owned utilities; and for-profit entities currently engaged in grid service provision via an established portfolio of aggregated distributed energy resources.

Eligible subrecipients include institutions of higher education; national laboratories/FFRDCs, non-profit entities; for-profit entities; Tribal Nations; state and local governmental entities; community choice aggregators; incorporated and unincorporated consortia; individual contributors; and partnerships or consortia of two or more of these entities.

Funding

In FY 2023, approximately \$50 million in federal funding is available for an estimated two to four new awards through this program. Awards are estimated to be between \$10 million and \$25 million.

The maximum expected project period for all four phases is 8 years.

In general, the following activities may only compose a limited portion of funding expenditures:

- Capital expenditures for purchase and installation of generation, storage, and load assets may not exceed 15% of total project costs;
- Recruitment and enrollment activities for consumer and commercially owned DERs may not exceed 10% of total project costs; and
- Direct payment of participation incentives to asset owners may not exceed 15% of total project costs excluding program income.

Matching and Cost Share

A cost share of at least 50 percent of the total project cost is required. The cost-share must come from nonfederal sources unless otherwise allowed by law, such as project participants, state or local governments, or third-party financing. Cost share may be provided in the form of cash or cash equivalents, or in-kind contributions.

Contact Information

Questions regarding this program must be submitted to: <u>oced.des.foa@hq.doe.gov</u>.

https://www.energy.gov/oced/distributed-energy-systems-demonstrations-program

FEDERAL GRANT PROFILE



Department: U.S. Department of Energy **Agency:** Office of Energy Efficiency and Renewable Energy

FY 2023 Electric Drive Vehicle Battery Recycling and Second Life Applications

Grant Overview

The purpose of this program is to reduce the costs associated with transportation, dismantling, and preprocessing of end-oflife electric drive vehicle batteries for recycling, as well as recycling of plastic and polymer electric drive vehicle battery accessory components through research, development, and demonstration projects. Eligible applicants are domestic entities including state, local and tribal governments, nonprofits, for-profit entities, and institutions of higher education.

Program History

	Total Funding	# of Awards
2022	\$60 million	10

Key Information

Total Funding: \$60 million Award Range: \$4 million - \$12 million Match: Varies Solicitation date: December 18, 2023 Proposal due: February 7, 2024 (concept paper), April 19, 2024 (full application)

https://eere-

exchange.energy.gov/Default.aspx#Foaldb32526c2-af4b-4e13-a37f-e9a1250287d6



Awardee Profile

Smartville, Inc Carlsbad, California

amount: \$6,019,555 year: 2022

Smartville, Inc. will develop and demonstrate its unique and innovative second-life battery life-balancing and unifying technology to accelerate realworld deployment of systems to fulfill utility customer and system-level needs for stationary energy storage.



Department: U.S. Department of Energy **Agency:** Office of Energy Efficiency and Renewable Energy

FY 2023 Electric Drive Vehicle Battery Recycling and Second Life Applications

Detailed Summary

The purpose of this program is to reduce the costs associated with transportation, dismantling, and preprocessing of end-of-life electric drive vehicle batteries for recycling, as well as recycling of plastic and polymer electric drive vehicle battery accessory components through research, development, and demonstration projects. Program funding will support innovative technologies and processes that reduce the cost of battery recycling to achieve scale-up and profitability. Projects under the following topic areas will be supported:

<u>Topic Area 1 - improving the economics of transportation, dismantling, and preprocessing of electric drive</u> <u>vehicle batteries</u>: Projects will improve the economics of lithium-Ion electric vehicle (EV) battery recycling to ensure an economically profitable EV battery recycling ecosystem. This topic area is specifically aimed at reducing the costs associated with transportation and dismantling prior to the chemical and metal separation processes at recycling facilities. Technologies and processes that can interface at the point of collection, such as those performed at or with auto recyclers, dealerships, or automobile mechanic shops, are of particular interest. Also of interest are technologies or product designs that lower the costs and improve safety associated with the transport and disassembly of electric drive vehicle batteries, including:

- Technologies and processes that improve the safety of end-of-life (EOL) EV battery transportation
- Product designs that decrease the cost and improve the safety of EOL EV battery packaging or transportation
- Technologies, processes, or logistics solutions that combine storage with transportation to allow full truck load (FTL) shipping
- Unique approaches that reduce the cost of transporting EOL EV batteries to a recycling facility
- Technologies and processes that reliably detect whether an EV battery should be designated as damaged or defective in a safe, convenient, and cost-effective manner

Topic Area 2 - recycling of electric drive vehicle battery accessory components: Projects will develop and demonstrate technologies and processes for recycling and disposal of plastics and polymer composites used in casings and enclosures of EV batteries. Approaches of interest include:

- Processes or technologies that reduce the cost and/or improve the economics of recycling plastic and polymer composites from EV battery packs
- Novel technologies for separating accessory components
- Methods to ensure complete removal of battery active materials from plastic and polymer composite components
- Methods to ensure safe disposal of waste materials and components recovered during the recycling process



• Development of novel use cases for incorporating recycling accessory component materials in new EV battery packs

Meaningful engagement and participation of workforce organizations, including labor unions, as well as underserved communities and under-represented groups, including Indian tribes, in projects is encouraged.

Applicant Eligibility

Eligible applicants are domestic entities including state, local and tribal governments, nonprofits, for-profit entities, U.S. territories, Indian tribes, institutions of higher education, and consortia of any of the above entities. Applicants are encouraged to demonstrate partnering commitments from key stakeholder organizations, including those at electric vehicle (EV) collection points, battery recyclers, battery manufacturers, relevant government agencies, trade associations, academic institutions, non-governmental organizations (NGOs), nonprofit organizations, and retailers, as applicable.

Applicants may submit more than one concept paper and full application, provided each application describes a unique, scientifically distinct project, however, only new applications will be accepted.

Funding

In FY 2023, approximately \$37 million will be available to support awards through this program as follows:

- <u>Topic Area 1</u>: approximately \$37 million in funding is available to support an estimated 4-9 awards ranging from \$4 million to \$8 million.
- <u>Topic Area 2</u>: approximately \$2 million in funding is available to support an estimated 1-2 awards ranging from \$1 million to \$2 million.

The project period for both topic areas is 36 months comprised of three 12-month budget periods.

Matching and Cost Sharing

Applicants must provide cash and/or in-kind matching contributions, as follows:

- <u>Topic Area 1:</u> at least 20 percent of the total project costs for research and development projects
- <u>Topic Area 2:</u> at least 50 percent of the total project costs for demonstration projects

Allowable in-kind contributions include the donation of volunteer time or the donation of space or use of equipment. Matching funds must come from nonfederal sources, such as project participants, state or local governments, or other third-party financing, unless otherwise allowed by law.

Contact Information

Program Staff DE-FOA-0003120@netl.doe.gov

https://eere-exchange.energy.gov/Default.aspx#Foaldb32526c2-af4b-4e13-a37f-e9a1250287d6

FEDERAL GRANT PROFILE



Department: U.S. Department of Energy **Agency:** Grid Deployment Office

FY 2024 BIL– Grid Resilience and Innovation Partnerships (GRIP): Grid Innovation Program (Section 40103(b))

Grant Overview

The Grid Resilience and Innovation Partnership Program (GRIP) is a combination of three individual Infrastructure Investment and Jobs Act programs combined under one application. The three programs that encompass GRIP are the competitive Grid Resilience Grants (40101c), the Smart Grid Grants (40107), and Grid Innovation Program (40103b). This overview focuses on the <u>Grid Innovation Program</u>.

Program History

	Total Funding	# of Awards
2022/2023	\$1,439,896,327	8

Key Information and Tips

Total Funding: \$1.82 billion

Award Range: Up to \$250 million (increased award size of \$1B for award of interregional transmission projects only) Match: 50%

Solicitation date: November 13, 2023 Proposal Due: January 12, 2024 (Concept Papers), May 22, 2024 (Full Application)

- Applicants must submit a Community Benefits Plan and corresponding budget.
- Applications that have partnerships with critical entities to ensure project success are a priority



Awardee Profile

Louisiana Department of Natural Resources, LA

amount: \$249,329,483 year: 2022

The State of Louisiana: Louisiana Hubs for Energy Resilient Operations (HERO) Project received funding to establish a foundational approach for accelerating more abundant, affordable, and reliable clean energy for greater power resilience in the face of rising extreme weather and more frequent natural disasters.



Department: U.S. Department of Energy **Agency:** Grid Deployment Office

FY 2024 BIL– Grid Resilience and Innovation Partnerships (GRIP): Grid Innovation Program (Section 40103(b))

Detailed Summary

This program seeks to provide financial assistance to one or multiple states, Tribes, local governments, and public utility commissions to collaborate with electric sector owners and operators to deploy projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Projects selected under Topic Area 3 may include technical and/or non-technical (e.g., focused on regulatory or business model innovation) approaches that improve grid reliability and resilience on the local, regional, and interregional scales. Applications may address the transmission system, the distribution system, storage, or a combination. Department of Energy (DOE) particularly seeks projects that include Independent System Operators (ISO), Regional Transmission Organizations (RTO), and/or Power Pools and will progress the field in the following areas: demonstrate an innovation in the approach to the project or deploy a technology innovation

FY24 GRIP Strategic Goals: DOE has identified three strategic goals for FY24 GRIP, including:

- <u>Goal #1</u>: Transform the U.S. electric grid at the transmission and distribution levels by increasing resilience in the face of extreme disruptions, enabling data-rich and flexible grid performance, and spurring innovation at all stages of project ideation and execution. <u>Priorities for all Topic Areas</u> <u>include</u>:
 - o Increase regional and interregional electricity transfer capacity;
 - o Increase system resilience in the face of climate change-induced natural disasters;
 - Address the most consequential system challenges that contribute to the increasing interconnection queue time for clean energy;
 - Enable data-rich and flexible grid performance v. spur innovation at all stages of project ideation and execution; and
 - Facilitate clean energy deployment, generation mix diversity, and other system benefits
- <u>Goal #2</u>: Prioritize energy justice as an essential component of infrastructure development by dramatically altering the relationship between energy providers and their communities. The projects funded under this program will demonstrate clear additionality and innovation in community and labor engagement, and a departure from a "business-as-usual" approach.
- <u>Goal #3</u>: Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment and foster an environment for sharing of best-practices and replication throughout the industry.



Project results should enable asset owners and operators to effectively articulate within local, state, regional and federal decision-making frameworks the economic, technical, and societal benefits of deploying new innovative technologies that improve system reliability and resilience.

<u>Priority Areas of Investment</u>: DOE has identified Projects and Technologies that are considered a high priority for FY24 GRIP:

- Projects that cover multiple utility service territories that will evolve and share utility best practices that increase resilience against extreme weather and adapt to the changing energy and technology landscapes.
- Projects that address substation hardening, including the automation and digitization of substations, and/or coordination with upgrades that enable distributed energy resource integration and electrification readiness.
- Projects that propose to construct new transmission infrastructure to resolve a specific and identified contingency condition that the applicant has been unable to resolve using standard investment and planning approaches.
- Projects that significantly increase the transmission capacity of existing rights-of-way using advanced conductors, grid-enhancing technologies, or high-voltage direct current in coordination with investments that enable integration and full utilization of high-capacity corridors.
- Projects that will deploy solutions to increasing the processing of interconnection applications and minimize the queue-related delays for clean energy and electrification loads at both the transmission and distribution levels.
- Projects that in combination with priority investments will foster growth of a highly skilled power sector workforce and minimize workforce constraints associated with power sector innovation.
- Projects that have a significant impact on the transmission system, including projects that leverage advanced transmission technologies and can reduce or remove the existing technical, economic, and regulatory barriers, demonstrate enhanced operational flexibility or capacity, and that enhance reliability to accelerate wide scale transmission expansion and renewable energy interconnection.
- Projects that implement novel and replicable approaches to reducing energy burden and increasing resilience for disadvantaged communities, especially projects that increase access to cheaper generation resources and reduce the impact of infrastructure costs.

<u>Topic Area 3: Grid Innovation Program (40103(b)) Objectives:</u> The 40103(b) program is targeted at achieving the strategic goals listed above through high-impact, innovative projects. DOE seeks applications that may include technical and/or non-technical (e.g., focused on regulatory or business model innovation) approaches that improve grid reliability and resilience on the local, regional, and interregional scales. Applications may address the transmission system, the distribution system, storage, or a combination. DOE particularly seeks projects that include Independent System Operators (ISO), Regional Transmission Organizations (RTO), and/or Power Pools and will progress the field in the following areas: demonstrate an innovation in the approach to the project or deploy a technology innovation.

• Projects that improve the reliability and resilience of the electrical grid especially in light of the need for significant changes to grid infrastructure driven by additions of clean generation (including over broad geographical areas) and electrification load (including in load pockets), updates to legacy assets, and increasing stress from climate-related weather events and other threats to physical



infrastructure. Projects should provide a clear description of how the proposed scope will enable a high quality of affordable electrical service given the need for these significant changes.

- Projects that leverage this program to affect durable and transformative change within and beyond the impacted project area, both through accomplishment of the specific project scope proposed as well as through use of that scope to de-risk or establish a novel approach that can be used for similar projects. For example, proposed projects may make use of novel approaches to project planning or cost allocation that would be adopted for future projects, novel organizational structures that would persist past the scope of the project, and/or novel technical approaches that can easily be replicated at additional sites.
- Projects that demonstrate meaningful public/private partnership approaches through strategic • involvement of both public and private sector actors. In particular, DOE recognizes that while eligibility for this topic area is restricted to States, local governments, Tribes, and public utility commissions, many projects may be executed primarily by private sector subrecipients. In these cases, applications should describe the approach of the public sector applicant and any additional public sector project partners to providing support to the overall project goal, including through policy and/or regulatory actions, and the approach that public sector entities will take to promote replicability of the proposed project structure. Applications combining multiple approaches are encouraged, and all applications should demonstrate how the proposed new, innovative approaches interact with each other and any existing infrastructure to increase overall system resiliency. Applications that invest in America's workforce; advance energy and environmental justice and support the goals of the Justice40 Initiative; engage in meaningful community and stakeholder engagement; and advance diversity, equity, inclusion, and accessibility are of particular importance in this topic area. This also includes leveraging existing local, state, regional, and federal resources that identify system needs, including the National Transmission Needs Study27. Technical approaches of interest and priority investments are discussed, but are not limited to, the below. Applicants are encouraged to clearly situate proposed projects within broader State, local, Tribal, and regional strategies on resilience, energy security, energy, and environmental justice, and decarbonization.

Applications under this topic area may address the transmission system, the distribution system, storage, or a combination. Under this topic area, DOE seeks applicants to use ambitious and innovative project concepts to address the following areas of particular interest:

- Innovative project approaches on the transmission system, including those leveraging advanced transmission technologies and those that can reduce or remove the existing technical, economic, and/or regulatory barrier(s) necessary to accelerate wide scale transmission expansion and renewable energy interconnection. Proposed solutions should demonstrate enhanced transmission system operational flexibility or capacity while enhancing reliability. Projects that meet these objectives are eligible for a higher maximum federal award. Applications may include one or more of the following approaches of interest:
 - Planning, modeling, cost allocation, investments, and strategies that accelerate interconnection of clean energy generation and/or storage, or delivery of service for electrification-related load;
 - Interregional or cross-ISO/RTO projects that address key grid reliability, flexibility, and/or resilience challenges, including any challenges or needs identified by local, regional, or



national analyses such as IRPs, ISO/RTO transmission planning studies, the National Transmission Needs Study, or the Atlantic Offshore Wind Transmission Study;

- Transmission lines which have been identified by the relevant grid operator/ISO/RTO as needed or as supporting the deployment of clean energy resources Addressing grid integration challenges for difficult-to-access clean generation resources, including offshore wind and geothermal generation;
- Major new transmission lines using approaches to reduce permitting and execution risk, including through leveraging novel permitting or land acquisition authorities and approaches, use of other relevant existing rights-of-way such as highway corridors, and other relevant approaches;
- Demonstration of reliable and resilient distribution system operations given high penetrations of distributed renewable generation, energy storage, and flexible customer loads as a percentage of total load, up to and including "full electrification" scenarios in a well-defined portion of a distribution system. Relevant projects may incorporate: o Electrification of industrial, commercial, and building energy uses including through district energy systems; o Black-start capable systems and control approaches to minimize negative impacts during power grid disruptions; o Provision of grid services in real time from distributed, advanced grid forming inverter-based systems at sufficient scale and system complexity, especially when based on locationally- and temporally specific system conditions rather than system-wide peak conditions or resource availability constraints.
- Behind the meter asset operations, aggregation, and coordination to provide demand response and grid services, including building systems, distributed generation, energy storage, electric vehicle fleets and others.
- Projects applications for energy storage may be applied to the transmission system, the distribution system, or a combination. o Innovative storage projects that deploy utilize renewable energy resources or varied energy storage in innovative and replicable ways to provide specific resilience benefits;
 - Strategic deployment of storage technologies in communities or regions that experience frequent extreme weather or other natural disasters or to provide a specific ability to better integrate variable renewable energy and electrification load. Applications should explicitly discuss why energy storage is the most beneficial and cost-effective approach to providing these benefits, especially as compared to traditional grid infrastructure. Projects may include any type of energy storage;
 - Innovative storage technologies that offer different performance characteristics than lithium-ion battery energy storage systems, provided that such technologies are marketready, and the proposed project is not focused on retiring technical risks.
- Transformative projects that enable coordinated operations and/or planning across the transmission and distribution networks, resulting in improved combination system applications and joint resilience, functionality, and cost-effectiveness across both grid sectors. This could involve using assets in one sector to provide services to the other in a manner that mitigates specific upgrade or expansion requirements, or efforts to improve visibility and communication across sectors to allow for optimization of grid planning or operations.
- Applications that demonstrate novel and replicable approaches to reducing energy burden and increasing resilience for disadvantaged communities, especially projects that increase access to cheaper generation resources, reduce the impact of infrastructure costs, or both. Applications that



reduce energy burden in combination with one or more of the above objectives are of particular interest.

 Applications that include technologies, approaches, or other innovative techniques that are not specifically addressed above but have the potential to meet the goals and objectives of this topic area by demonstrating innovative approaches or enhancing regional resilience are eligible for consideration.

In addition, all teams should clearly articulate their strategy to enable widescale adoption of their proposed solutions following a successful demonstration and their intended commitment to utilize these or resultant solutions within their own systems and jurisdictions. Projects selected under this topic area will attempt to resolve technical and commercial adoption barriers by increasing stakeholder confidence in the performance, cost, and value characteristics of their proposed system. To ensure maximum impact following these demonstrations, a clear plan to disseminate findings, replicate successes, incorporate the outcomes of the demonstrations into investment decision-making frameworks, and activate additional public and private capital is crucial. These plans should consider which stakeholders and decision makers must be informed as to the demonstration results, what types and quality of information would lead to concrete investment decisions, and how to integrate with local, Tribal, state, and regional energy strategies and transition plans to amplify overall impact and rate of adoption. Initial strategies should be presented in the application, but it is expected that these plans will be developed more fully over the course of the project.

<u>Applications not of interest</u>: DOE has delineated projects that they are not interested in funding for Topic Area 3:

- For applications that contain a public-private sector partnership, an application that does not demonstrate a meaningful level of collaboration among the entities.
- Applications for projects in which prime applicants propose to suballocate funding according to schema that lack sufficient detail for DOE to evaluate their potential impact, or that are presented at a concept-level stage.

Applicant Eligibility

Eligible applicants include states, a combination of 2 or more states, Indian tribes, local governments, and public utility commissions.

Matching and Cost Share

Topic Area 3 requires at least a 50% cost share. The cost share must come from non-federal sources unless otherwise allowed by law.

Funding

In FY 2024, approximately \$1.82 billion in funding is available to support an estimated 4- 40 awards up to \$250 million. An increased award size of \$1 billion may be awarded for interregional transmission projects only that deploy significant transmission investments.

The project period is 60-96 months.



Contact Information

DOE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding the FY24 GRIP FOA must be submitted to: FOA3195@netl.doe.gov. Questions must be submitted not later than 3 business days prior to the application due date and time. Please note, feedback on individual concepts will not be provided through Q&A.

All questions and answers related to this FOA will be posted on Exchange at: <u>https://infrastructure-</u> <u>exchange.energy.gov/</u>. You must first select this specific FOA Number to view the questions and answers specific to this FOA.

Grid Deployment Office (GDO) will attempt to respond to a question within 3 business days unless a similar question and answer has already been posted on the website.

Questions related to the registration process and use of the Exchange website should be submitted to: InfrastructureExchangeSupport@hq.doe.gov.


Department: U.S. Department of Energy **Agency:** Energy Efficiency and Renewable Energy (EERE)

FY 2023 Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

Grant Overview

This program will support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. Specifically, this program is seeking innovative solutions for on-road and off-road vehicles to develop and accelerate the charging infrastructure and drastically-reduced greenhouse gas (GHG) emissions in support of Administration goals. Eligible applicants are forprofit entities, nonprofit entities, individuals, state governments, local governments, and tribal governments.

Program History

	Total Funding	# of Awards
2022	\$85,793,110	43

Key Information

Total Funding: \$99.5 million Award Range: \$500,000- \$15 million Match: Varies Solicitation Date: May 19, 2023 Proposal due: June 26, 2023 (Concept Papers), August 11, 2023 (Full Application)

https://eere-

exchange.energy.gov/Default.aspx#Foalda9a59972-6e45-4e62-aa45-7fa07d2c7ced



Awardee Profile

City of Arlington Texas

amount: \$780,182 year: 2022

The City of Arlington received funding for a Multimodal/Drone Delivery Demonstration project focused on Disadvantaged Communities and Mobility Challenged Populations. **Department:** U.S. Department of Energy **Agency:** Energy Efficiency and Renewable Energy (EERE)

FY 2023 Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

Detailed Summary

The purpose of this program is to support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. Specifically, this program is seeking innovative solutions for on-road and off-road vehicles to develop and accelerate the charging infrastructure and drastically-reduced greenhouse gas (GHG) emissions in support of Administration goals. Under this program, the Department of Energy is seeking projects that address one of the following priority areas:

- <u>Topic Area 1A: High-Capacity, Long Cycle Life Lithium-Sulfur (Li-S) Batteries</u>: The objective of this topic area is to improve S utilization, control polysulfide shuttle and other loss mechanisms. The expected final deliverable includes five 2 Ah or greater Li-S cells delivered for independent testing and demonstrating at least 250 Wh/kg and over 1,000 cycles at C/3 charge/discharge rate, 80% depth of discharge, with 80% capacity retention. It is strongly encouraged that a battery manufacturer or original equipment manufacturer (OEM) be the prime applicant.
- <u>Topic Area 1B: Mechanistic Modeling of Li-S Batteries</u>: The objective of this topic area is to seek more accurate and in-depth understanding of sulfur cathode electrochemistry through closely coupled experimental and computational investigation of all relevant phenomena. The goal of this understanding is to indicate materials and electrode design approaches that will improve practical sulfur cathode energy density and cycle life.
- <u>Topic Area 2: Improved 12-volt Lead Acid Batteries for Safety-critical Electric Vehicle Applications</u>: The objective of this topic area is to improve the service life and performance requirements while reducing the cost of the enhanced flooded battery (EFB) and absorbed glass mat (AGM) lead acid battery. Improvements in 12V lead battery performance and cost can be achieved through development of more robust product designs and manufacturing processes. Projects will be required to produce three, 12V lead acid batteries for an independent evaluation including technical reports and research papers that document battery life and cost improvement.
- <u>Topic Area 3: Advanced Integrated On-board Charging System</u>: The objective of this topic area is to research, develop, and demonstrate innovative, functionally integrated systems co-optimizing both on-board charging and electric traction drive power electronics to reduce cost and improve charging capability, including bi-directional vehicle-to-home (V2H) and vehicle-to-building (V2B). The projects should focus on integration and optimization of the on-board charger and inverter to provide increased functionality with an improved efficiency and reduced overall cost. Teams are highly encouraged to include vehicle manufacturers, power electronics and charging equipment manufacturers/suppliers.

Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

- <u>Topic Area 4: Advanced Wireless Charging Concepts for Heavy-Duty Vehicles</u>: The objective of this topic area is to research, develop, and demonstrate advanced wireless charging concepts for electrified heavy-duty commercial vehicles in static and/or opportunity charging applications capable of charging at rates required to meet the vehicle's daily energy and operational requirements. Applications in depots and warehouses used by short-haul/regional HD trucks are of particularly strong interest given the vast number of these depots and the potential replicability of projects that focus on depots.
- <u>Topic Area 5: Development and Demonstration of Dimethyl Ether Engine for Off-Road Applications</u>: The objective of this topic area is to develop and demonstrate a near-commercial, direct-injection engine prototype suitable for use in off-road vehicles or equipment that demonstrates a substantial reduction in GHG emissions when operated with a renewable source of DME. Engine demonstration may be conducted via engine dynamometer testing or vehicle platform integration and chassis dynamometer testing.
- <u>Topic Area 6: Hydrogen Combustion Engines</u>: The objective of the area of interest is to research, develop, and validate an internal combustion (IC) engine for on-road and non-road (off-road, rail, and shipping) applications that can fully operate on hydrogen while achieving near or equivalent efficiency of conventional diesel engines and meeting prevailing EPA emission standards. While 4-stroke IC engines are predominant in commercial vehicle application, we also encourage proposals for hydrogen combustion by two-stroke opposed piston engines. Applicant teams should include an Original Equipment Manufacturer (OEM). Teams are also encouraged to include research partners from universities and/or National Laboratories.
- <u>Topic Area 7: Circularity and Sustainability of Polymer Composites for Vehicle Lightweighting and</u> <u>Decarbonization</u>: The objective of this area of interest is to reduce the embodied energy and lifecycle greenhouse gas emissions of polymer composites. This could be accomplished through novel recycling methods for existing polymer composites, development of new polymer composite materials to enable recyclability, or improvements to manufacturing processes to reduce CO2 emissions. Proposed materials should be applicable for structural automotive components considering strength, stiffness, durability, manufacturing cycle time, end of life, and cost. Applicant teams are encouraged to include members from all parts of the materials development, manufacturing, scale-up production, and/or recycling aspects of the supply chain.
- <u>Topic Area 8: Domestic Magnesium Production Research</u>: The objective of this area of interest is to develop low cost, low carbon footprint methods of domestic magnesium production for lightweight vehicle components. VTO is targeting expanding the current domestic landscape to include additional primary and secondary methods to produce magnesium including reducing cost and greenhouse gas emissions of electrolysis and Pidgeon methods. Proposals will identify the targeted domestic source of magnesium as either primary or secondary, as well as the proposed production methods being developed for extraction/recovery/concentration, refining, and alloying to structural automotive grades. Applicant teams are encouraged, to include members from all parts of the materials development, manufacturing, scale-up production, and/or recycling aspects of the supply chain.
- <u>Topic Area 9: Novel Lightweight Materials</u>: The objective of this area of interest is to explore promising new lightweight materials beyond current industry use or Program focus (e.g. advanced high-strength steel, aluminum, magnesium, and polymer composites reinforced with carbon fiber or conventional fillers) and assess applicability to automotive structural components. Proposed materials should strive to match incumbent properties such as strength, ductility, corrosion

resistance, fatigue life, appearance, and manufacturability, and significantly improve upon incumbent properties such as density, cost, and carbon footprint.

- <u>Topic Area 10: Mobility System Approaches Supporting Public Transportation</u>: The objective of this area of interest is to develop and demonstrate mobility-system level approaches to improve the efficiency and convenience of public transportation, acknowledging its critical role in both low-carbon people movement and ensuring equitable mobility access. Proposed projects should take an innovative mobility system-level approach to enhance and integrate public transportation, influence traveler behaviors, and harness connections between housing hubs and destinations (jobs, grocery stores, health care, etc.). Applicant teams must include a public transportation entity.
- <u>Topic Area 11: Reducing Soft Costs of Electric Vehicle Infrastructure to Enable Widespread</u>
 <u>Deployment</u>: The objective of this topic area is to develop innovative and coordinated strategies, processes, or programs to significantly reduce the soft costs of new EV charging installations implemented across the national charging infrastructure. These programs should be applicable to residential and/or public locations such as workplaces, multi-unit dwellings, retail establishments or corridor locations, to include the soft costs for both AC level 2 charging and DC fast charging.</u>
 Applications should also assess the impacts of the proposed approach to reducing the total cost, and timeline of new installations. Applications should target only one of the following strategies for soft cost reduction:
 - A comprehensive nationwide recognition and technical assistance program for authorities having jurisdiction (AHJs) or municipalities aimed at streamlining the installation of electric vehicle supply equipment by reducing permitting, compliance processes or other soft cost barriers and thereby increasing deployment. The program should be compelling, enduring, simple and straightforward, accessible and expandable, robust and reliable, and highlight visible
 - A comprehensive national program focused on streamlining utility interconnection process related to EVs
 - Other innovative approaches
- <u>Topic Area 12: Consumer Education Campaign for Electric Vehicles and Charging</u>: The objective of this area of interest is to implement a high-impact, brand neutral, nationwide consumer education campaign targeting consumers in the process of shopping for a vehicle. This campaign should address core questions consumers have about EVs resulting in increased levels of consumer confidence and comfort in choosing to purchase an electric vehicle. DOE is interested in projects that have the greatest opportunity to increase the rate of consumer EV adoption due to increased familiarity with EVs and EV charging. Projects that include the purchase or lease of vehicles, EV charging implementation, or construction are not eligible through this topic area.
- <u>Topic Area 13: Demonstration and Deployment (Open topic)</u>: The objective of this area of interest is to draw on this portfolio and explore novel solutions to transportation and related clean energy challenges through demonstration or deployment projects not otherwise addressed under this program. This area could include projects to address challenges unique to their geographic areas and solutions with potential for replication in other areas across the country, or other ways to accelerate clean transportation deployment. The project team must include at least one active and DOE designated Clean Cities coalition with a significant role (at least 25% of project budget). Active Coalitions can be found here. Projects of interest include but are not limited to:
 - Projects with innovative approaches to decarbonize transportation;
 - Projects that address mobility needs of local underserved regions or populations;

Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

- Implement transportation fuels, vehicles, systems, and technologies that have positive impact on greenhouse gas emissions, such as those that implement renewable fuels and renewable energy sources (ex: solar/wind power) into transportation systems;
- Those which implement advanced technologies or alternative fuels in off-road, marine, rail, and other non-road applications. For example, ships and rail projects can have very high GGE reduction per vehicle by adopting alternative fuels, renewable blends and/or advanced technologies those which develop roadmaps for decarbonization in local Clean Cities regions;
- Projects that focus on transitioning high-impact heavy-duty fleets to new fuels and technologies that reduce petroleum consumption and greenhouse gas and criteria emissions;
- Projects which improve transportation affordability and reduce emissions by accelerating or enabling widespread access to affordable alternative and renewable fuels; and
- o Projects that holistically drive adoption of clean energy technologies across jurisdictions
- <u>Topic Area 14: Clean Cities Coalition Network Outreach, Education and Training</u>: The objective of this area of interest is to fund projects that foster broader adoption of clean vehicles and installation of supporting infrastructure and contribute the reductions in lifecycle greenhouse gases and other harmful air pollutants through outreach, education and training activities. The project budget cannot be used for technology demonstration or deployment. Project teams must include at least one DOEdesignated Clean Cities coalition.

To support the goal of building a clean and equitable energy economy, projects funded under this program are expected to:

- Advance diversity, equity, inclusion, and accessibility (DEIA);
- Contribute to energy equity; and
- Invest in America's workforce

Applicant Eligibility

Eligible applicants are for-profit entities, nonprofit entities, individuals, state governments, local governments, and tribal governments. Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995 are not eligible to apply for funding.

Funding

In FY 2023, approximately \$99.5 million is available to support between 37 and 63 awards ranging from \$500,000-\$7 million. Specific funding amounts for each topic area is as follows:

- <u>Topic Area 1A: High-Capacity, Long Cycle Life Lithium-Sulfur (Li-S) Batteries</u>: an estimated \$12 million to support 3-4 awards ranging from \$3 million to \$4 million under this topic area. The project period is 36 months.
- <u>Topic Area 1B: Mechanistic Modeling of Li-S Batteries</u>: an estimated \$3 million to support 1-2 awards ranging from \$1.5 million to \$3 million under this topic area. The project period is 36 months.
- <u>Topic Area 2: Improved 12-volt Lead Acid Batteries for Safety-critical Electric Vehicle Applications</u>: an estimated \$5 million to support 2-3 awards ranging from \$1 million to \$2 million under this topic area. The project period is 36 months.

Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

- <u>Topic Area 3: Advanced Integrated On-board Charging System</u>: an estimated \$10 million to support 2-3 awards ranging from \$3,333,333 million to \$5 million under this topic area. The project period is 36 months.
- <u>Topic Area 4: Advanced Wireless Charging Concepts for Heavy-Duty Vehicles</u>: an estimated \$5 million to support 1-2 awards ranging from \$2.5 million to \$5 million under this topic area. The project period is 36 months.
- <u>Topic Area 5: Development and Demonstration of Dimethyl Ether Engine for Off-Road Applications</u>: an estimated \$5 million to support 1 award ranging of up to \$2.5 million under this topic area. The project period is 36 months.
- <u>Topic Area 6: Hydrogen Combustion Engines</u>: an estimated \$7 million to support 2-4 awards ranging from \$1.5 million to \$3.5 million under this topic area. The project period is 36 months.
- <u>Topic Area 7: Circularity and Sustainability of Polymer Composites for Vehicle Lightweighting and</u> <u>Decarbonization</u>: an estimated \$8 million to support 4-5 awards ranging from \$1.5 million to \$2 million under this topic area. The project period is 36 months.
- <u>Topic Area 8: Domestic Magnesium Production Research</u>: an estimated \$4 million to support 2-4 awards ranging from \$1 million to \$2 million under this topic area. The project period is 36 months.
- <u>Topic Area 9: Novel Lightweight Materials</u>: an estimated \$3 million to support 3-4 awards ranging from \$750,000 million to \$1 million under this topic area. The project period is 36 months.
- <u>Topic Area 10: Mobility System Approaches Supporting Public Transportation</u>: an estimated \$10 million to support 3-5 awards ranging from \$2 million to \$3,333,333 under this topic area. The project period is 36 months.
- <u>Topic Area 11: Reducing Soft Costs of Electric Vehicle Infrastructure to Enable Widespread</u>
 <u>Deployment</u>: an estimated \$15 million to support 2-4 awards ranging from \$3.75 million to \$7 million under this topic area. The project period is 36 months.
- <u>Topic Area 12: Consumer Education Campaign for Electric Vehicles and Charging</u>: an estimated \$5 million to support 1-2 awards ranging from \$2 million to \$5 million under this topic area. The project period is 24-36 months.
- <u>Topic Area 13: Demonstration and Deployment (Open topic)</u>: an estimated \$5 million to support 5-10 awards ranging from \$500,000 to \$1 million under this topic area. The project period is 24-36 months.
- <u>Topic Area 14: Clean Cities Coalition Network Outreach, Education and Training</u>: an estimated \$5 million to support 5-10 awards ranging from \$500,000 to \$1 million under this topic area. The project period is 24-36 months.

Matching and Cost Share

Cost share requirements for each topic areas are as follows:

- <u>Topic Area 1A:</u> 20 percent
- <u>Topic Area 1B:</u> 20 percent
- <u>Topic Area 2:</u> 50 percent
- <u>Topic Area 3:</u> 20 percent
- Topic Area 4: 20 percent (R&D), 50 percent (demonstration)
- Topic Area 5: 20 percent (R&D), 50 percent (demonstration)
- <u>Topic Area 6:</u> 20 percent
- <u>Topic Area 7:</u> 20 percent
- <u>Topic Area 8:</u> 20 percent

- <u>Topic Area 9:</u> 20 percent
- <u>Topic Area 10:</u> 20 percent
- <u>Topic Area 11:</u> Match not required
- <u>Topic Area 12:</u> Match not required
- <u>Topic Area 13:</u> 50 percent
- <u>Topic Area 14:</u> Match not required

Contact Information

Program Staff DE-FOA-0002893@netl.doe.gov

https://eere-exchange.energy.gov/Default.aspx#Foalda9a59972-6e45-4e62-aa45-7fa07d2c7ced



Department: U.S. Department of Transportation **Agency:** Federal Aviation Administration (FAA)

FY 2024 Airport Zero Emission Vehicle (ZEV) and Infrastructure Pilot Program

Grant Overview

The purpose of this program is to improve airport air quality and facilitate the use of zero-emissions technologies at airports. This program allows public-use airports in the National Plan of Integrated Airport Systems (NPIAS) that are eligible to receive funding through the Airport Improvement Program (AIP), to purchase zero-emissions airport vehicles and the infrastructure required to operate them. Eligible applicants are local governments, academic institutions, nonprofits, private sector, state governments, and tribal organizations/institutions.

Program History

	Total Funding	# of Awards
2021	\$21.9 million	8
2020	\$9 million	5

Key Information

Total Funding: Unspecified Match: 5%-25% Solicitation Date: Unknown Proposal Due: November 1, 2023 (pre-application)

https://www.faa.gov/airports/environmental/zero emissions vehicles



Tips:

- Airports in Environmental Protection Agency (EPA)designated nonattainment areas will be given first priority for consideration.
- Priority consideration will be also given to applicants that will achieve the greatest air quality benefits measured by the number of emissions reduced per dollar of award funds expended.



Department: U.S. Department of Transportation **Agency:** Federal Aviation Administration (FAA)

FY 2024 Airport Zero Emission Vehicle (ZEV) and Infrastructure Pilot Program

Detailed Summary

The purpose of this program is to improve airport air quality and facilitate the use of zero-emissions technologies at airports. This program allows public-use airports in the National Plan of Integrated Airport Systems (NPIAS) that are eligible to receive funding through the Airport Improvement Program (AIP), to purchase zero-emissions airport vehicles and the infrastructure required to operate them.

Funding must be used for vehicles that are owned or leased by the airport sponsor and used on-airport for airport purposes with some limited off-airport use. All vehicles purchased or leased through the program must be airport-dedicated, meaning that they must be an integral part of the aeronautical, transportation, security, or maintenance services at the airport, or other essential airport need; used on a regular basis in normal operation of the airport; and stored and maintained within the airport boundary.

Eligible project types include:

- <u>Zero-emission airport vehicles</u>: airport-owned, on-road zero-emission vehicles (ZEV) that do not produce exhaust emissions of any criteria pollutant; vehicles are limited to those with all-electric or hydrogen-powered drive trains
- <u>ZEV infrastructure</u>: construction or modification of infrastructure to facilitate fuel delivery to funded ZEVs, including refueling stations, rechargers, on-site fuel storage tanks, and other equipment needed for station operation; airports must limit the capacity of refueling and recharging stations to the number of project vehicles and their fueling requirements

Applicant Eligibility

Eligible applicants are local governments, academic institutions, non-profits, private sector, state governments, and tribal organizations/institutions.

Eligible airport sponsors are public-use airports in the National Plan of Integrated Airport Systems (NPIAS) that are eligible to receive funding through the Airport Improvement Program (AIP).

Airports in EPA-designated maintenance areas will only be considered after all applications from nonattainment areas are considered for funding. Airports in attainment areas will only be considered after all applications in non-attainment areas and in maintenance areas have been considered.



Funding

In FY 2024, an unspecified amount of funding is available to support awards through this program. Awards will be issued before the end of the federal fiscal year. Vehicles purchased through this program may <u>not</u> be sold or transferred during their useful life without prior notification and written approval by the funding agency.

Matching and Cost Sharing

The cost-sharing percentages of this program are equal to those of the Airport Improvement Program (AIP), which are as follows:

- Large and medium primary hub airports:
 - o 20 percent of eligible costs for noise program implementation
 - o 25 percent of eligible costs for other projects
- Small primary, reliever, and general aviation airports:
 - o 5 percent to 10 percent of eligible costs, depending on statutory requirements

Contact Information

Michael Lamprecht michael.lamprecht@faa.gov

https://www.faa.gov/airports/environmental/zero emissions vehicles



Department: U.S. Department of Transportation **Agency:** Federal Transit Administration (FTA)

FY 2024 Grants for Buses and Bus Facilities Competitive Program

Grant Overview

The purpose of the Grants for Buses and Bus Facilities Competitive Program is to assist in the financing of buses and bus facilities capital projects, including replacing, rehabilitating, purchasing, or leasing buses or related equipment, and rehabilitating, purchasing, constructing, or leasing bus-related facilities. Eligible applicants are designated recipients that allocate funds to fixed route bus operators, states, or local governmental authorities that operate fixedroute bus service, and Indian tribes.

Program History

	Total Funding	# of Awards
2023	\$473.1 million	47
2022	\$551 million	50

Key Information

Total Funding: \$390,045,823 Match: Varies by project type Solicitation date: February 8, 2024 Proposal due: April 25, 2024

> • All capital procurements must comply with FTA's Buy America requirements.

https://www.transit.dot.gov/bus-program



Awardee Profile

Santa Cruz Metropolitan Transit District, CA

amount: \$20,381,950 year: 2023

The Santa Cruz Metropolitan Transit District (METRO) will receive funding to buy fuel cell electric buses to replace older diesel buses, build a hydrogen fueling station, make facility upgrades to accommodate the new buses, and develop a workforce training plan. The project will improve air quality, safety, reliability, and state of good repair for residents living in the city of Santa Cruz.



Department: U.S. Department of Transportation **Agency:** Federal Transit Administration (FTA)

FY 2024 Grants for Buses and Bus Facilities Competitive Program

Detailed Summary

The purpose of this program is to improve the condition, or otherwise modernize, the transit system. Eligible projects include capital projects to replace, rehabilitate, purchase, or lease buses, vans, or related equipment; or to rehabilitate, purchase, construct, or lease bus-related facilities regardless of propulsion type or emissions. A single application may include both vehicle and facility components, along with associated equipment and workforce development plans.

The funding agency will consider the quality and extent to which applicants demonstrate how the proposed project will:

- Improve the safety of the transit system;
- Improve the condition of, or otherwise modernize, the transit system;
- and enhance access and mobility within the service area, including improving reliability of service for riders, particularly for low-income or underserved communities and people with disabilities.

The funding agency will also proactively evaluate whether a project will create proportional impacts to all populations in a project area and increase equitable access to project benefits. Projects should:

- Address equity and environmental justice, particularly for communities that have experienced decades of underinvestment and are most impacted by climate change, pollution, and environmental hazards; and
- Support the creation of good-paying jobs with the free and fair choice to join a union and the incorporation of strong labor standards and training and placement programs, especially registered apprenticeships, in project planning stages.

Applicant Eligibility

Eligible applicants include designated recipients that allocate funds to fixed route bus operators, states (including territories and Washington, DC) or local governmental entities that operate fixed route bus service, and Indian tribes. Eligible subrecipients include all otherwise eligible applicants and also private nonprofit organizations engaged in public transportation.

Except for projects proposed by Indian tribes, all proposals for projects in rural (non-urbanized) areas must be submitted by a State, either individually or as a part of a statewide application. States and other eligible applicants also may submit consolidated proposals for projects in urbanized areas.

Applications may also include partnerships with other entities that intend to participate in the implementation of the project, including, but not limited to, specific vehicle manufacturers, equipment vendors, owners or operators of related facilities, or project consultants.



Applicants may apply both to this program and the related Low or No Emission Grant Program (Low-No Program). Applicants are encouraged to submit projects for consideration under both programs whenever practicable.

Funding

In FY 2024, approximately \$390,045,823 is available to support awards through this program. No single grant recipient will be awarded more than 10 percent of the amount made available. A minimum of 15 percent will be awarded to projects located in rural areas.

Applicants are encouraged to identify scaled funding options in case insufficient funding is available to fund a project at the full requested amount. If an applicant indicates that a project is scalable, the applicant must provide an appropriate minimum funding amount that will fund an eligible project that achieves the objectives of the program and meets all relevant program requirements.

Funds are available for obligation for three fiscal years after the fiscal year in which the competitive awards are announced. Funds are available only for eligible costs incurred after announcement of project selections. The funding agency will rate projects higher if grant funds can be obligated within 12 months of selection and the project can be implemented within a reasonable time frame.

For proposals proposing projects related to zero-emission vehicles, 5 percent of the award amount must be used for workforce development to retrain the existing workforce, unless applicants certify that less funding is needed to carry out the project plan. Supportive services, such as childcare and transportation assistance for participants, may be an eligible use of program funds within this 5 percent.

Up to 0.5 percent of the award amount may be used for eligible workforce development activities. An additional 0.5 percent of the award amount may be used for costs associated with training at the National Transit Institute.

Matching and Cost Sharing

Matching requirements vary by project type as follows:

- The maximum federal share for projects that involve leasing or acquiring transit buses (including clean fuel or alternative fuel vehicles) for purposes of complying with or maintaining compliance with the Clean Air Act (CAA) or the Americans with Disabilities Act (ADA) of 1990 is 85 percent of the net project cost.
- The maximum federal share for the cost of acquiring, installing, or constructing vehicle-related equipment or facilities (including clean fuel or alternative fuel vehicle-related equipment or facilities) for purposes of complying with or maintaining compliance with the CAA or ADA is 90 percent of the net project cost of such equipment or facilities that are attributable to compliance with the CAA or ADA.
- The award recipient must itemize the cost of specific, discrete, vehicle-related equipment or facility components associated with compliance with the CAA or ADA to be eligible for the maximum 90 percent federal share for these costs.
- The federal share of the cost of other projects shall not exceed 80 percent.



Eligible sources of matching funds include cash, revenues, and in-kind contributions.

Contact Information

Kirsten Wiard-Bauer FTA Office of Program Management Phone: 202-366-7052 <u>ftalownobusnofo@dot.gov</u>

https://www.transit.dot.gov/bus-program



Department: U.S. Department of Transportation **Agency:** Federal Highway Administration

FY 2023 Charging and Fueling Infrastructure Discretionary Grant Program

Grant Overview

This program will strategically deploy electric vehicle charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure located on public roads or in other publicly accessible locations as well as strategically deploy charging and alternative fueling infrastructure located along designated alternative fuel corridors. Eligible applicants include states; political subdivisions of states; metropolitan planning organizations; local governments; special purpose districts or public authorities with a transportation function; Indian Tribes; U.S. territories; and an authority, agency, or instrumentality of, or an entity owned by, one or more entities previously mentioned.

Program History

This is a new program funded through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: \$700 million Award Range: Varies Match: 20 percent Solicitation date: March 14, 2023 Proposal due: May 30, 2023

https://www.fhwa.dot.gov/environment/cfi/



Tips

- Applicants are encouraged to propose projects that are scalable and identify scaled funding options in case insufficient funding is available to fund an applicant's project or a bundled project at the full requested amount
- Applicants are encouraged to note whether the project would expand alternative fueling/charging access to rural areas, low- and moderate- income neighborhoods, and/or underserved or hard to reach communities where the private sector may not invest absent federal funding



Department: U.S. Department of Transportation **Agency:** Federal Highway Administration

FY 2023 Charging and Fueling Infrastructure Discretionary Grant Program

Detailed Summary

The purpose of this program is to strategically deploy electric vehicle (EV) charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure located on public roads or in other publicly accessible locations and strategically deploy charging and alternative fueling infrastructure located along designated alternative fuel corridors. This program will accelerate an electrified and alternative fuel transportation system that is convenient, affordable, reliable, equitable, accessible, and safe. The goals of this program are to:

- Supplement, not supplant, necessary private sector investment
- Complement existing Federal programs
- Facilitate broad public access to a national charging and alternative fuel infrastructure network to accelerate adoption of zero emissions vehicles
- Implement Justice40 objectives, lower transportation costs, and increase economic opportunity;
- Advance job quality, workforce development, and workforce equity
- Reduce greenhouse gas and vehicle-related emissions.

Funding under this program will be available through two separate categories:

<u>Community Funding</u>: This category will support projects on any public road or in other publicly accessible locations that are expected to reduce greenhouse gas emissions and to expand or fill gaps in access to publicly accessible EV charging infrastructure, or hydrogen, propane, or natural gas fueling infrastructure. Eligible infrastructure is publicly accessible electric vehicle charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure, or natural gas fueling infrastructure. Propane fueling infrastructure is limited to infrastructure for medium- and heavy-duty vehicles Projects may be located on any public road or in other publicly accessible locations, such as parking facilities at public buildings, public schools, and public parks, or in publicly accessible parking facilities owned or managed by a private entity.

Eligible project costs under this category include:

- The acquisition and installation of eligible infrastructure including:
 - Any related construction or reconstruction and the acquisition of real property directly related to the project
 - Development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, preliminary engineering and design work, and other preconstruction activities
 - Contracting with a private entity for the acquisition, construction, installation, maintenance, or operation of eligible infrastructure included in the project.

• Educational and community engagement activities to develop and implement education programs through partnerships with schools, community organizations, and vehicle dealerships to support the use of zero-emission vehicles and associated infrastructure

Projects expanding access to charging and fueling infrastructure in rural areas, low- and-moderate income neighborhoods, and communities with a low ratio of private parking spaces to households or a high ratio of multiunit dwellings to single family homes shall be prioritized.

This category seeks to layer in a "dig once," future-proofing approach when awarding funding. This "dig once" approach aims to maximize the overall societal and economic benefits of a project while minimizing the cost and disruption of construction by considering and installing for current needs and as many of the reasonably foreseeable future needs, as practicable. Examples may include, but are not limited to, communications and broadband conduit, duct banks, and adequate power distribution for multimodal vehicular charging.

Corridor Funding: This category will support the buildout of charging or alternative fueling infrastructure along designated alternative fuel corridors (AFCs). Projects will contract with a private entity for acquisition and installation of publicly accessible EV charging infrastructure, or hydrogen, propane, or natural gas fueling infrastructure that is directly related to the charging or fueling of a vehicle along designated AFCs. The funding agency seeks to award projects in both urban and rural areas along designated AFCs to create a balance of publicly accessible electric charging and alternative fuel infrastructure.

The EV charging infrastructure should be conveniently and safely located as close to the AFC as possible, and, in general, no greater than one mile from Interstate exits or highway intersections along designated corridors. Hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure is allowable no more than five miles from Interstate exits or highway intersections along the corridor. Eligible project costs include:

- Contracting with a private entity for acquisition and installation of eligible infrastructure
- Providing a private entity with operating assistance for the first 5 years of operations after the
 installation of eligible infrastructure while the facility transitions to independent system operations.
 Operating assistance shall be limited to costs allocable to operating and maintaining the eligible
 infrastructure and service, and may not exceed the amount of a contract to acquire and install eligible
 infrastructure.
- The acquisition and installation of traffic control devices located in the right-of-way to provide directional information to eligible infrastructure included in the project.

Applicants for this category should ensure their applications, as they relate to EV infrastructure, align with their State's National Electric Vehicle Infrastructure Deployment Plan.

Program priorities include:

- <u>Safety</u>: The funding agency seeks projects that are committed to advancing safe, efficient transportation.
- <u>Climate Change and Sustainability</u>: The program seeks to fund projects that reduce greenhouse gas emissions in the transportation sector, incorporate evidence-based climate resilience measures and features, reduce the lifecycle greenhouse gas emissions from the project materials, and avoid adverse environmental impacts to air or water quality, wetlands, and endangered species, and address the disproportionate negative environmental impacts of transportation on disadvantaged communities,

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- Equity and Justice40: The program seeks projects that will create proportional impacts to all populations in a project area, remove transportation related disparities to all populations in a project area, and increase equitable access to project benefits, consistent with EO 13985, Advancing Racial Equity and Support for Underserved Communities. The Department also seeks to award projects that address equity and environmental justice, particularly for communities that have experienced decades of underinvestment and are most impacted by climate change, pollution, and environmental hazards.
- <u>Workforce Development, Job Quality, and Wealth Creation:</u> The program will prioritize projects that support the creation of good-paying jobs with the free and fair choice to join a union and the incorporation of strong labor standards and training and placement programs, especially registered apprenticeships, in project planning stages. The program also seeks projects that support wealth creation, consistent with the DOT's Equity Action Plan through the inclusion of local inclusive economic development and entrepreneurship such as the utilization of Disadvantaged Business Enterprises, Minority-owned Businesses, Women-owned Businesses, or 8(a) firms.
- <u>Accessibility</u>: The funding agency is committed to making infrastructure accessible to and usable by individuals with disabilities

Applicant Eligibility

Eligible applicants include states; political subdivisions of states; metropolitan planning organizations; local governments; special purpose districts or public authorities with a transportation function, including a port authority; Indian Tribes; U.S. territories; and an authority, agency, or instrumentality of, or an entity owned by, one or more entities previously mentioned. Additionally, a State or local authority with ownership of publicly accessible transportation facilities is eligible for the community charging component.

If a group (two or more) of eligible entities above submits a joint application, the group must identify a lead applicant to serve as prime awardee in the event an award is made.

While applicants can choose to apply for only one program component, applicants may apply for funding under both components by submitting only one application.

An applicant may seek the same award amounts from multiple DOT discretionary opportunities or seek a combination of funding from multiple DOT opportunities.

Funding

In FY 2023, approximately \$700 million is available to support awards under this program. Funding for each category is as follows:

- <u>Community Funding</u>: a total of \$350 million is available to support awards between \$500,000 and \$15 million through this category. Of this funding \$150 million is appropriated through FY 2022, and up to \$200 million is appropriated through FY 2023.
- <u>Corridor Funding</u>: a total of \$350 million is available to support awards greater than \$1 million. Of this funding \$150 million is appropriated through FY 2022, and up to \$200 million is appropriated through FY 2023.



All awards of FY 2022 funding are available for obligation though September 30, 2025 and must be expended by September 30, 2030. All awards of FY 2023 funding are available for obligation through September 30, 2026 and must be expended by September 30, 2031.

Awardees must provide at least 20 percent of the total project cost as a matching share.

The funding agency may consider award sizes under the anticipated minimum award size thresholds mentioned above upon receiving the full pool of applications and assessing the needs of the program in relation to grant priorities and consideration.

Contact Information

Program Staff CFIgrants@dot.gov

https://www.fhwa.dot.gov/environment/cfi/



Department: U.S. Department of Transportation **Agency:** Federal Highway Administration

FY 2023 Electric Vehicle Charger Reliability and Accessibility Accelerator

Grant Overview

The funding made available in this set-aside from the National Electric Vehicle Infrastructure (NEVI) Formula Program will be for the Electric Vehicle Charger Reliability and Accessibility Accelerator to focus on repairing or replacing broken or nonoperational EV chargers to improve the reliability of existing EV charging infrastructure. Eligible applicants are State departments of transportation (DOTs) and local governments.

Program History

This new program funding is a set-aside from the National Electric Vehicle Infrastructure (NEVI) Formula Program.

Key Information and Tips

Total Funding: Up to \$100 million Award Range: None Match: 20 percent Solicitation date: September 13, 2023 Proposal due: November 13, 2023

https://www.grants.gov/web/grants/viewopportunity.html?oppId=350190



Tips

- The funding agency anticipates that all eligible projects will likely be awarded under this solicitation
- Applicants are encouraged to submit applications that include multiple locations to streamline the application process and review
- Applicants are strongly encouraged to work directly with site hosts and current owners or operators to ensure viability of the project



Department: U.S. Department of Transportation **Agency:** Federal Highway Administration

FY 2023 Electric Vehicle Charger Reliability and Accessibility Accelerator

Detailed Summary

The funding made available in this set-aside from the National Electric Vehicle Infrastructure (NEVI) Formula Program will be for the Electric Vehicle Charger Reliability and Accessibility Accelerator to repair or replace existing, publicly accessible chargers that are listed as "temporarily unavailable" because they are broken or non-operational. Publicly accessible chargers may include both publicly and privately owned chargers. This program will be informed by data from the <u>Alternative Fuels Station Locator</u>, which is maintained by the National Renewable Energy Laboratory (NREL) through its Alternative Fuels Data Center (AFDC).

A charging port can be identified as "temporarily unavailable" for several reasons, and the number of ports listed as "temporarily unavailable" fluctuates regularly. To view the public EV charging ports in the U.S. that are currently listed as "temporarily unavailable" on the Station Locator, please go to the following <u>Website</u>.

The EV charging providers with ports that are broken or non-operational and are not listed in the AFDC as "temporarily unavailable" on September 13, 2023 will have 4 weeks to begin reporting status to AFDC via a pre-existing Application Programming Interface. A final programmatic list of "temporarily unavailable" EV charging ports will be published on October 11, 2023 and Program eligibility will be limited to chargers included in that list.

Projects must support repair or replacement of existing broken or non-operational publicly accessible Level 2 or Direct Current Fast Charging (DCFC) EV chargers, as listed by the AFDC, as of October 11, 2023. The State DOT or local government in which the broken or nonoperational charger is located may apply, with anticipated total eligible chargers as of September 11, 2023 within each State.

Eligible applicants may propose repair or replacement projects on public or private property, provided that the eligible applicant can demonstrate consent from the charging station operator and property owner. Applicants will need to confirm that chargers are broken and nonoperational. Actual award amounts will be based on the application and budget submitted for each specific charger and may vary.

Whenever possible, applicants are encouraged to submit applications that include multiple locations to streamline the application process and review. Applicants are encouraged to submit applications with their contractors or subgrant recipients identified to the extent allowable under their procurement requirements. In addition, applicants are also strongly encouraged to work directly with site hosts and current owners or operators to ensure viability of the project.

Applicant Eligibility

Eligible applicants are State departments of transportation (DOTs) and local governments. States and localities are encouraged to coordinate to the extent possible to address broken and non-operational chargers.



Funding

In FY 2023, approximately \$100 million is available to support an unspecified number of projects under this program. Based on initial estimates of eligible chargers and the funding available, the funding agency anticipates that all eligible projects will likely be awarded under this solicitation.

The period of performance for awards is 12 months from the date of the grant agreement. Funded chargers should be operational within 12 months. Recipients are encouraged to start work on all chargers as soon as possible, and ensure that repairs for chargers in disadvantaged communities are not delayed.

Matching and Cost Sharing

Awardees must provide at least 20 percent of the total cost of the project as a matching share in cash or inkind services.

Contact Information

Address any questions to: <u>RAA-NEVI@dot.gov</u>

https://www.grants.gov/web/grants/view-opportunity.html?oppId=350190



Department: U.S. Department of Transportation **Agency:** Federal Transit Administration (FTA)

FY 2022 Low or No Emission Grant Program (Low-No Program)

Grant Overview

The Low or No Emission Grant Program provides funding for the purchase or lease of zero-emission and low-emission transit buses, including acquisition, construction, and leasing of required supporting facilities such as recharging, refueling, and maintenance facilities. Eligible applicants include designated recipients, states, local governmental authorities, and Indian tribes.

Program History

	Total Funding	# of Awards
2021	\$182 million	49
2020	\$130 million	41

Key Information and Tips

Total Funding: \$1.1 billion Match: Varies by project type Solicitation date: March 4, 2022 Proposal due: May 31, 2022

- Priority consideration will be given to applications that address workforce impacts of autonomous vehicles or other innovative motor vehicle technology
- All capital procurements must comply with FTA's Buy America requirements





Awardee Profile

City of Tucson, AZ

amount: \$3,757,100 year: 2020

The City of Tucson will receive funds to purchase electric buses and associated charging infrastructure to improve service efficiency and customer service.



Department: U.S. Department of Transportation **Agency:** Federal Transit Administration (FTA)

FY 2022 Low or No Emission Grant Program (Low-No Program)

Detailed Summary

The purpose of this program is to fund the purchase or lease of zero-emission and low-emission transit buses, including acquisition, construction, and leasing of required supporting facilities such as recharging, refueling, and maintenance facilities. Eligible projects include projects or programs of projects in an eligible area for:

- Purchasing or leasing low or no emission buses
- Acquiring low or no emission buses with a leased power source
- Constructing or leasing facilities and related equipment for low or no emission buses
- Construction new public transportation facilities to accommodate low or no emission buses
- Rehabilitating or improving existing public transportation facilities to accommodate low or no emission buses

Projects to acquire or lease low or no emission buses or bus facilities must make greater reductions in energy consumption and harmful emissions than comparable standard buses or other low or no emission buses. Applications may include both vehicle and facility components, along with associated equipment and workforce development plans.

A "low or no emission bus" is defined as a passenger vehicle used to provide public transportation that significantly reduces energy consumption or harmful emissions, including direct carbon emissions, when compared to a standard vehicle. The statutory definition includes zero emission transit buses, which are defined as buses that produce no direct carbon emissions and no particulate matter emissions under any and all possible operational modes and conditions. Examples of zero emission bus technologies, include but are not limited to, hydrogen fuel-cell buses and battery-electric buses. The development or deployment of prototype vehicles is not eligible for funding under the Low-No Program.

Projects proposing to deploy autonomous vehicles or other innovative motor vehicle technology should demonstrate that all vehicles will comply with applicable safety requirements, including those administered by the National Highway Traffic Safety Administration (NHTSA) and Federal Motor Carrier Safety Administration (FMCSA).

Projects should support the funding agency's priorities and objectives to:

- Renew American transit systems
- Reduce greenhouse gas emissions from public transportation
- Advance racial equity
- Maintain and create good-paying jobs with a free and fair choice to join a union
- Connect communities



Projects should also support the goals of the Biden Administration's Executive Order 14008, Tackling the Climate Crisis at Home and Abroad and Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.

Applicants should describe what specific climate change or environmental justice activities have been incorporated, including whether a project supports a Climate Action Plan, whether an equitable development plan has been prepared, and whether tools such as EPA's <u>EJSCREEN</u> or the Department of Transportation's <u>Historically Disadvantaged Community tool at Transportation Disadvantaged Census Tracts</u> have been applied in project planning.

Applicant Eligibility

Eligible applicants include designated recipients, states, local governmental authorities, and Indian tribes.

Except for projects proposed by Indian tribes, proposals for funding projects in rural (non-urbanized) areas must be submitted as by a state or as part of a consolidated state proposal. To be considered eligible, applicants must be able to demonstrate that requisite legal, financial, and technical capabilities to receive and administer federal funds under this program. States and other eligible applicants may submit consolidated proposals for projects in urbanized areas.

Applications may also include partnerships with other entities that intend to participate in the implementation of the project, including, but not limited to, specific vehicle manufacturers, equipment vendors, owners or operators of related facilities, or project consultants.

Applicants may apply both to this program and the related Grants for Buses and Bus Facilities Program.

Funding

In FY 2022, a total of \$1,100,561,189 is available to supports grants under this program. The funding agency may cap the amount a single recipient or state may receive as part of the selection process.

A minimum of 25 percent of the amount awarded under the Low-No Program will be awarded to low emission projects other than zero emission vehicles and related facilities.

Applicants are encouraged to identify scaled funding options in case insufficient funding is available to fund a project at the full requested amount. If an applicant indicates that a project is scalable, the applicant must provide an appropriate minimum funding amount that will fund an eligible project that achieves the objectives of the program and meets all relevant program requirements.

Funds must be obligated within three fiscal years after the fiscal year the funds were made available. Projects that can obligate funds within 12 months of award selection, and that can be implemented within a reasonable time frame, may be rated higher by the funding agency.

For proposals proposing projects related to zero-emission vehicles, 5 percent of the award amount must be used for workforce development to retrain the existing workforce, unless applicants certify that less funding is needed to carry out the project plan.

Up to 0.5 percent of the award amount may be used for eligible workforce development activities. An additional 0.5 percent of the award amount may be used for costs associated with training at the National Transit Institute.



The funding agency will grant award recipients the authority to incur pre-award costs beginning on the date of the award announcement.

Matching requirements vary by project type as follows:

- The maximum federal share for projects that involve leasing or acquiring transit buses (including clean fuel or alternative fuel vehicles) for purposes of complying with or maintain compliance with the Clean Air Act is 85 percent of the net project cost.
- The maximum federal share for the cost of acquiring, installing, or constructing vehicle-related equipment or facilities (including clean fuel or alternative fuel vehicle-related equipment or facilities) for purposes of complying with or maintaining compliance with the Clean Air Act is 90 percent of the net project cost of such equipment or facilities that are attributable to compliance with the Clean Air Act.
- The federal share of the cost of other projects shall not exceed 80 percent.

Eligible sources of matching funds include cash, revenues, and in-kind contributions.

Applicants may submit proposals to both the Buses and Bus Facilities Program and Low-No Program, or one or the other. Applications should be submitted separately. If a project submitted for consideration under both programs is selected for funding, the funding agency will exercise its discretion to determine under which program the project will receive an award.

Contact Information

Amy Volz FTA Office of Program Management (202) 366-7484 <u>Amy.volz@dot.gov</u> <u>ftalownobusnofo@dot.gov</u>

https://www.transit.dot.gov/lowno



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Multimodal Project Discretionary Grant (MPDG) - Nationally Significant Freight and Highway Projects (INFRA)

Grant Overview

INFRA (known statutorily as the Nationally Significant Multimodal Freight & Highway Projects) awards competitive grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas. Eligible applicants are states, metropolitan planning organizations (MPOs), local governments, special purpose districts and public authorities with transportation functions, Federal land management agencies, tribal governments, and multistate or multijurisdictional groups of public entities.

Program History

	Total Funding	# of Awards
2021	\$905 million	24
2020	\$906 million	20
2019	\$856 million	20

Key Information

Total Funding: \$1.55 billion Minimum Grant Award: \$5 million rural, \$25 million urban Match: 40 percent Solicitation date: March 23, 2022 Proposal due: May 23, 2022

https://www.transportation.gov/grants/mpdg-announcement



Awardee Profile

Mississippi Department of Transportation

AMOUNT: \$71.4 million Year: 2020

The Mississippi Department of Transportation received funding to complete the construction of the 15.6mile Greenville Bypass, which will carry US 82 from near the Greenville Bridge over the Mississippi River to Leland, east of Greenville.



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Multimodal Project Discretionary Grant (MPDG) - Nationally Significant Freight and Highway Projects (INFRA)

Detailed Summary

The INFRA program provides federal financial assistance to highway and freight projects of national or regional significance. Eligible projects include:

- Highway freight projects carried out on the National Highway Freight Network (NHFN);
- Highway or bridge projects carried out on the National Highway System (NHS), including projects that add capacity on the Interstate System to improve mobility or projects in a national scenic area;
- Railway-highway grade crossing or grade separation projects;
- Freight projects that are 1) an intermodal or rail project, or 2) within the boundaries of a public or private freight rail, water (including ports), or intermodal facility;
- Wildlife crossing project;
- Surface transportation project within the boundaries of, or functionally connected to, an international border crossing that improves a facility owned by a Federal, state of local government and increases throughput efficiency;
- Marine highway corridor project that is functionally connected to the NHFN and is likely to reduce onroad mobile source emissions; and
- Highway, bridge, or freight projects on the National Multimodal Freight Network.

To be eligible under INFRA, a project within the boundaries of a freight rail, water (including ports), or intermodal facility must be a surface transportation infrastructure project necessary to facilitate direct intermodal interchange, transfer, or access into or out of the facility and must significantly improve freight movement on the NHFN. In this context, improving freight movement on the NHFN may include shifting freight transportation to other modes, thereby reducing congestion and bottlenecks on the NHFN. For a freight project within the boundaries of a freight rail, water (including ports), or intermodal facility, Federal funds can only support project elements that provide public benefits.

INFRA grants may be used for the construction, reconstruction, rehabilitation, acquisition of property (including land related to the project and improvements to the land), environmental mitigation, construction contingencies, equipment acquisition, and operational improvements directly related to the system performance. INFRA grants may also fund development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, preliminary engineering, design, and other preconstruction activities, provided the project meets statutory requirements. However, DOT is seeking to use INFRA funding on projects that result in construction, meaning development phase activities are less competitive by nature of the evaluation structure. Public-Private partnership assessments for projects in the development phase are also eligible costs.



Additional consideration will be given to projects that benefit an Area of Persistent Poverty or a Historically Disadvantaged Community.

Rebranded as the **MPDG Extra Initiative**, projects which receive a Highly Recommended rating, but are not awarded, are automatically designated MPDG Extra Projects, unless the Department determines that they are not reasonably likely to satisfy the TIFIA project type eligibilities. This designation provides the sponsors of these projects the opportunity to apply for TIFIA credit assistance for up to 49 percent of eligible project costs. Under current policy, TIFIA credit assistance is limited to 33 percent of eligible project costs unless the applicant provides a strong rationale for requiring additional assistance.

Applicant Eligibility

Eligible applicants for INFRA grants are: (1) a state or group of states; (2) a metropolitan planning organization that serves an Urbanized Area (as defined by the Bureau of the Census) with a population of more than 200,000 individuals; (3) a unit of local government or group of local governments; (4) a political subdivision of a State or local government; (5) a special-purpose district or public authority with a transportation function, including a port authority; (6) a Federal land management agency that applies jointly with a state or group of states; (7) a tribal government or a consortium of tribal governments; (8) a multistate corridor organization; or (9) a multistate or multijurisdictional group of entities.

Definitions

Under the INFRA Program, DOT has defined **urban** as inside an Urbanized Area, as designated by the U.S. Census Bureau, with a population of 200,000 or more. <u>Click here</u> for a list of Urbanized Areas that are considered urban for the purposes of the INFRA grant program. The Department will consider a project to be in a **rural** area if the majority of the project (determined by geographic location(s) where the majority of the money is to be spent) is located in a rural area.

A project is located in an **Area of Persistent Poverty** if: (1) the County in which the project is located consistently had greater than or equal to 20 percent of the population living in poverty in all three of the following datasets: (a) the 1990 decennial census; (b) the 2000 decennial census; and (c) the 2020 Small Area Income Poverty Estimates; OR (2) the Census Tract in which the project is located has a poverty rate of at least 20 percent as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR (3) the project is located in any territory or possession of the United States. USDOT has published <u>a table</u> to help applicants identify if a project meets the Area of Persistent Poverty definition for a County or Census Tract.

A project is located in a **Historically Disadvantaged Communities** if: (1) the project is located in certain qualifying census tracts, identified in <u>this table</u>; OR (2) the project is located on Tribal land; OR (3) the project is located in any territory or possession of the United States.

Common Application

To help **streamline the grant process** for applicants, the DOT has combined the applications for the National Infrastructure Project Assistance grant program (Mega), Nationally Significant Freight and Highway Projects (INFRA), and Rural Surface Transportation Grant program (Rural) into the MPDG common application. Applicants may choose to apply to one, two, or all three of these grant programs by submitting only one

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application. While they remain separate programs for the award, the programs share many common characteristics, including larger project size, multimodal eligibility, and many shared statutory project requirements. Because of these shared characteristics, many projects can be eligible and considered for multiple programs using a single application.

While the MPDG grant opportunity consists of three separate programs, DOT will evaluate common applications for the programs using common merit criteria and considerations to provide a more streamlined and efficient application process for project sponsors. The common set of criteria includes **safety; state of good repair; economic impacts, freight movement, and job creation; climate change, resiliency, and the environment; equity, multimodal options, and quality of life; and innovation.** Additional considerations include cost-effectiveness; demonstrated project readiness, which includes technical assessment, financial completeness, environmental review, and permitting risk; and geographic diversity among recipients, including a balance between the needs of urban and rural projects.

Funding

In FY 2022, \$1.55 billion is available for awards through INFRA. In addition to FY 2022 INFRA funds, amounts from prior year authorizations, presently estimated at up to \$150 million, may be made available and awarded under this solicitation. INFRA funds must be obligated by September 30, 2025.

To qualify as a **large project**, the minimum project size for large projects is the lesser of (1) \$100 million; (2) 30 percent of a state's FY 2-21 Federal-aid apportionment if the project is located in one state; or (3) 50 percent of the larger participating State's FY 2021 apportionment for projects located in more than one state. The minimum grant request must be at least \$25 million for large projects.

Projects are classified as **small projects** if they do not meet the large project requirements outlined above. The minimum grant request must be at least \$5 million for small projects.

Approximately, 15 percent of available funds are reserved for small projects, and 85 percent of funds are reserved for large projects. At least 25 percent of funds provided for INFRA large projects must be used for projects located in rural areas. At least 30 percent of funds provided for INFRA small projects must be used for projects located in rural areas.

Additionally, IIJA specified that \$150 million in available INFRA funding be set aside for INFRA Leverage Pilot program projects. The INFRA Leverage Pilot Program will fund projects with a Federal share of less than 50 percent. No less than 10 percent of the Leverage Pilot funds will be awarded to small INFRA projects and not less than 25 percent of the Leverage Pilot funds will be awarded to rural projects.

Previously incurred costs will be counted toward the minimum project size requirement only if they were eligible project costs and were expended as part of the project for which the applicant seeks funds. Previously incurred costs can be used to meet the minimum project size threshold, however, cannot be reimbursed with INFRA grant funds, nor will count towards the non-federal match requirement.

INFRA grants may be used for up to 60 percent of future eligible project costs. Other Federal assistance may satisfy the non-Federal share requirement for an INFRA grant, but total Federal assistance for a project receiving an INFRA grant may not exceed 80 percent of future eligible project costs. Non-Federal sources include state funds originating from programs funded by state revenue, local funds originating from state or local revenue-funded programs, private funds, or other funding sources of non-Federal origins.



Contact Information

Paul Baumer (202) 366-1092 MPDGrants@dot.gov

https://www.transportation.gov/grants/mpdg-announcement



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Multimodal Project Discretionary Grant (MPDG) – National Infrastructure Project Assistance (Mega)

Grant Overview

The Mega Program (known statutorily as the National Infrastructure Project Assistance program) will support large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits. Eligible applicants are state, metropolitan planning organizations, units of local government, political subdivisions of states, special purpose district or public authority with a transportation function, including a port authority, tribal governments or a consortium of Tribal governments, partnerships between Amtrak and one or more entities described above, or a consortium of eligible applicants listed above.

Program History

This is a new grant program created under the Infrastructure Investment and Jobs Act (IIJA).

Key Information

Total Funding: \$1 billion Award Range: Unspecified Match: 40 percent Solicitation date: March 23, 2022 Proposal due: May 23, 2022

https://www.transportation.gov/grants/mpdg-announcement



Tips

- Additional consideration will be given to projects that benefit an Area of Persistent Poverty or a Historically Disadvantaged Community
- Application requires a Benefit Cost Analysis
- Applicants must submit a plan for the collection and analysis of data to identify the impacts of the project and accuracy of any forecast prepared during the development phase of the project



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Multimodal Project Discretionary Grant (MPDG) – National Infrastructure Project Assistance (Mega)

Detailed Summary

The Mega Program will support large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits. Eligible projects include:

- a highway or bridge project on the National Multimodal Freight Network
- a highway or bridge project on the National Highway Freight Network
- a highway or bridge project on the National Highway System
- a freight intermodal (including public ports) or freight rail project that provides public benefit
- a railway-highway grade separation or elimination project; an intercity passenger rail project
- a public transportation project that is eligible under assistance under Chapter 53 of title 49 U.S.C. and is a part of any of the project types described above
- a grouping, combination, or program of interrelated, connected, or dependent projects of any of the projects described above

Mega grants may be used for development-phase activities and costs, including planning, feasibility analysis, revenue forecasting, alternatives analysis, data collection and analysis, environmental review and activities to support environmental review, preliminary engineering and design work, and other preconstruction activities, including the preparation of a data collection and post-construction analysis plan; and construction, reconstruction, rehabilitation, acquisition of real property (including land relating to the project and improvements to that land), environmental mitigation (including projects to replace or rehabilitate culverts or reduce stormwater runoff for the purpose of improving habitat for aquatic species), construction contingencies, acquisition of equipment, protection, and operational improvements directly relating to the project.

Additional consideration will be given to projects that benefit an Area of Persistent Poverty or a Historically Disadvantaged Community.

Projects that receive a Highly Recommended rating, but are not awarded, are automatically designated **MPDG Extra Projects**, unless the Department determines that they are not reasonably likely to satisfy the Transportation Infrastructure Finance and Innovation Act (TIFIA) project type eligibilities. This designation provides the sponsors of these projects the opportunity to apply for TIFIA credit assistance for up to 49% of eligible project costs. Under current policy, TIFIA credit assistance is limited to 33% of eligible project costs unless the applicant provides strong rationale for requiring additional assistance.



Applicant Eligibility

Eligible applicants for Mega grants are: (1) a State or a group of States; (2) a metropolitan planning organization; (3) a unit of local government; (4) a political subdivision of a State; (5) a special purpose district or public authority with a transportation function, including a port authority; (6) a Tribal government or a consortium of Tribal governments; (7) a partnership between Amtrak and one or more entities described above; and (8) a group of entities described above.

Definitions

DOT has defined **urban** as inside an Urbanized Area, as a designated by the U.S. Census Bureau, with a population of 200,000 or more. <u>Click here</u> for a list of Urbanized Areas that are considered urban for the purposes of the INFRA grant program. The Department will consider a project to be in a **rural** area if the majority of the project (determined by geographic location(s) where the majority of the money is to be spent) is located in a rural area.

A project is located in an **Area of Persistent Poverty** if: (1) the County in which the project is located consistently had greater than or equal to 20 percent of the population living in poverty in all three of the following datasets: (a) the 1990 decennial census; (b) the 2000 decennial census; and (c) the 2020 Small Area Income Poverty Estimates; OR (2) the Census Tract in which the project is located has a poverty rate of at least 20 percent as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR (3) the project is located in any territory or possession of the United States. USDOT has published <u>a table</u> to help applicants identify if a project meets the Area of Persistent Poverty definition for a County or Census Tract.

A project is located in a **Historically Disadvantaged Communities** if: (1) the project is located in certain qualifying census tracts, identified in <u>this table</u>; OR (2) the project is located on Tribal land; OR (3) the project is located in any territory or possession of the United States.

Common Application

To help **streamline the grant process** for applicants, the DOT has combined the applications for the National Infrastructure Project Assistance grant program (Mega), Nationally Significant Freight and Highway Projects (INFRA), and Rural Surface Transportation Grant program (Rural) into the MPDG common application. Applicants may choose to apply to one, two, or all three of these grant programs by submitting only one application. While they remain separate programs for the purposes of award, the programs share many common characteristics, including a larger project size, multimodal eligibility, and many shared statutory project requirements. Because of these shared characteristics, it is possible for many projects to be eligible and considered for multiple programs using a single application.

While the MPDG grant opportunity consists of three separate programs, DOT will evaluate common applications for the programs using common merit criteria and considerations to provide a more streamlined and efficient application process for project sponsors. The common set of criteria include **safety; state of good repair; economic impacts, freight movement, and job creation; climate change, resiliency, and the environment; equity, multimodal options, and quality of life; and innovation.** Additional considerations include cost effectiveness; demonstrated project readiness, which includes technical assessment, financial completeness, and environmental review and permitting risk; and geographic diversity among recipients, including a balance between the needs of urban and rural projects.



Funding

In FY 2022, \$1 billion is available for awards through Mega. The Department will award 50 percent of the funds to projects greater than \$500 million in cost, and 50 percent of the funds to projects greater than \$100 million but less than \$500 million in cost.

Mega grants may be used for up to 60 percent of future total eligible project costs. Other Federal assistance may satisfy the non-Mega share requirement for a Mega grant, but total Federal assistance for a project receiving a Mega grant may not exceed 80 percent of future total eligible project costs. Previously incurred costs or previously expended or encumbered funds cannot be used towards meeting match requirements.

Contact Information

Paul Baumer (202) 366-1092 MPDGrants@dot.gov

https://www.transportation.gov/grants/mpdg-announcement



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Multimodal Project Discretionary Grant (MPDG) - Rural Surface Transportation Grant (Rural)

Grant Overview

The Rural Surface Transportation Grant Program will support projects to improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, generate regional economic growth and improve quality of life. Eligible projects for Rural grants include highway, bridge, and tunnel projects that help improve freight, safety, and provide or increase access to agricultural, commercial, energy, or transportation facilities that support the economy of a rural area. Eligible applicants are states, regional transportation planning organizations, a unit of local government, a tribal government or consortium of tribal governments, and multijurisdictional groups of public entities.

Program History

This is a new grant program created under the Infrastructure Investment and Jobs Act (IIJA).

Key Information

Total Funding: \$300 million Award Range: Unspecified Match: 20 percent Solicitation date: March 23, 2022 Proposal due: May 23, 2022

https://www.transportation.gov/grants/mpdg-announcement



Tips

- The Rural Program has a higher statutory federal share than Mega and INFRA, meaning if applicants seek the full Rural federal share, the project will not be eligible for consideration under Mega or INFRA
- This application requires a Benefit-Cost Analysis
- Projects should be based on the results of preliminary engineering
- Additional consideration will be given to projects that benefit an Area of Persistent Poverty or a Historically Disadvantaged Community


Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Multimodal Project Discretionary Grant (MPDG) - Rural Surface Transportation Grant (Rural)

Detailed Summary

The Rural Program will support projects to improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, generate regional economic growth, and improve quality of life. Eligible projects include:

- a highway, bridge, or tunnel project eligible under National Highway Performance Program (23 U.S.C.119)
- a highway, bridge, or tunnel project eligible under Surface Transportation Block Grant (23 U.S.C. 133)
- a highway, bridge, or tunnel project eligible under Tribal Transportation Program (23 U.S.C. 202)
- a highway freight project eligible under National Highway Freight Program (23 U.S.C.167)
- a highway safety improvement project, including a project to improve a high-risk rural road as defined by the Highway Safety Improvement Program (23 U.S.C. 148)
- a project on a publicly-owned highway or bridge that provides or increases access to an agricultural, commercial, energy, or intermodal facility that supports the economy of a rural area
- a project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services

Rural grants may be used for development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, preliminary engineering and design work, and other preconstruction activities; and construction, reconstruction, rehabilitation, acquisition of real property (including land related to the project and improvements to the land), environmental mitigation, construction contingencies, acquisition of equipment, and operational improvements.

Additional consideration will be given to projects that benefit an Area of Persistent Poverty or a Historically Disadvantaged Community.

Projects that receive a Highly Recommended rating, but are not awarded, will be automatically designated **MPDG Extra Projects**, unless the Department determines that they are not reasonably likely to satisfy the Transportation Infrastructure Finance Innovation Act (TIFIA) project type eligibilities. This designation provides the sponsors of these projects the opportunity to apply for TIFIA credit assistance for up to 49% of eligible project costs. Under current policy, TIFIA credit assistance is limited to 33 percent of eligible project costs unless the applicant provides a strong rationale for requiring additional assistance.



Applicant Eligibility

Eligible applicants for Rural grants are: (1) a state; (2) a regional transportation planning organization; (3) a unit of local government; (4) a tribal government or a consortium of tribal governments; or (5) a multijurisdictional group of entities above.

Definitions

Under the Rural Program, DOT has defined **urban** as inside an Urbanized Area, as designated by the U.S. Census Bureau, with a population of 200,000 or more. <u>Click here</u> for a list of Urbanized Areas that are considered urban for the purposes of the INFRA grant program. The Department will consider a project to be in a **rural** area, and eligible for the Rural Program, if the majority of the project (determined by geographic location(s) where the majority of the money is to be spent) is located in a rural area.

A project is located in an **Area of Persistent Poverty** if: (1) the County in which the project is located consistently had greater than or equal to 20 percent of the population living in poverty in all three of the following datasets: (a) the 1990 decennial census; (b) the 2000 decennial census; and (c) the 2020 Small Area Income Poverty Estimates; OR (2) the Census Tract in which the project is located has a poverty rate of at least 20 percent as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR (3) the project is located in any territory or possession of the United States. USDOT has published <u>a table</u> to help applicants identify if a project meets the Area of Persistent Poverty definition for a County or Census Tract.

A project is located in a **Historically Disadvantaged Communities** if: (1) the project is located in certain qualifying census tracts, identified in <u>this table</u>; OR (2) the project is located on Tribal land; OR (3) the project is located in any territory or possession of the United States.

Common Application

To help **streamline the grant process** for applicants, the DOT has combined the applications for the National Infrastructure Project Assistance Grant Program (Mega), Nationally Significant Freight and Highway Projects (INFRA), and Rural Surface Transportation Grant Program (Rural) into the MPDG common application. Applicants may choose to apply to one, two, or all three of these grant programs by submitting only one application. While they remain separate programs for the purposes of the award, the programs share many common characteristics, including larger project size, multimodal eligibility, and many shared statutory project requirements. Because of these shared characteristics, it is possible for many projects to be eligible and considered for multiple programs using a single application.

While the MPDG grant opportunity consists of three separate programs, DOT will evaluate common applications for the programs using common merit criteria and considerations to provide a more streamlined and efficient application process for project sponsors. The common set of criteria includes **safety; state of good repair; economic impacts, freight movement, and job creation; climate change, resiliency, and the environment; equity, multimodal options, and quality of life; and innovation**. Additional considerations include cost-effectiveness; demonstrated project readiness, which includes technical assessment, financial completeness, environmental review, and permitting risk; and geographic diversity among recipients, including a balance between the needs of urban and rural projects.



Funding

In FY 2022, \$300 million is available for awards through the Rural Program. At least 90 percent of Rural grant amounts must be at least \$25 million, and up to 10 percent of Rural grants may be for grant amounts of less than \$25 million.

IIJA specifies that 15 percent of the Rural Program funds be reserved for eligible projects located in states that have rural roadway fatalities as a result of lane departures that are greater than the average of rural roadway fatalities as a result of lane departures in the United States. This is defined based on a five-year rolling average of rural roadway departure fatality rate per 100 million VMT. Additionally, IIJA specifies that 25 percent of the Rural program funds shall be reserved for eligible projects that further the completion of designated routes of the Appalachian Development Highway System.

Rural grants may be used for up to 80 percent of future eligible project costs, except eligible projects that further the completion of a designated segment of the Appalachian Development Highway System under section 14501 of title 40 of the U.S.C., or address a surface transportation infrastructure need identified for the Denali access system program under section 309 of the Denali Commission Act of 1998 may apply for up to 100 percent of the project costs. Other Federal assistance may satisfy the non-Rural share requirement for a Rural grant up to 100 percent of project costs. Please note that the Rural Program has a higher statutory maximum Federal share than Mega and INFRA. Applications which seek funding above the statutory maximum share for MEGA and INFRA will only be eligible for an award from the Rural program. Previously incurred costs or previously expended or encumbered funds cannot be used towards meeting match requirements.

Contact Information

Paul Baumer (202) 366-1092 MPDGrants@dot.gov

https://www.transportation.gov/grants/mpdg-announcement



Department: U.S. Department of Transportation **Agency:** Federal Transit Administration

FY 2022 Passenger Ferry Grant Program

Grant Overview

The Passenger Ferry Grant Program will improve existing passenger ferry services; establish new ferry services; and repair and modernize ferry boats, terminals, and related facilities and equipment. The program's goals are to address the critical backlog of state of good repair and safety investments and provide critical and cost-effective transportation links in urban areas throughout the United States. Eligible applicants are designated recipients of Section 5307 funds, states or regional authorities, and direct recipients of the Federal Transit Administration's Urbanized Area Formula Grants that operate a public ferry system in an urbanized area.

Program History

	Total Funding	# of Awards
2021	\$45.2 million	11
2020	\$47.5 million	12

Key Information and Tips

Total Funding: \$36.5 million Match: 20 percent Solicitation date: July 7, 2022 Proposal due: September 6, 2022

 Recipients are permitted to use up to 0.5 percent of their requested grant award for workforce development activities

https://www.transit.dot.gov/grants/grantprograms/passenger-ferry-grant-program-section-5307h



Awardee Profile

Kitsap County Public Transportation Benefit Area Authority (Kitsap Transit), Kitsap County, Washington

amount: \$7,700,000 year: 2021

Kitsap Transit received funding to replace a diesel vessel with a new, environmentally beneficial battery-electric passenger-only ferry and necessary charging infrastructure to carry passengers across Sinclair Inlet, between Port Orchard and Bremerton. This project will ensure continued service reliability, maintain a state of good repair and, by improving air quality, advance environmental justice in Kitsap County Washington.

Department: U.S. Department of Transportation **Agency:** Federal Transit Administration

FY 2021 Passenger Ferry Grant Program

Detailed Summary

The purpose of this program is to improve existing passenger ferry services; establish new ferry services; and repair and modernize ferry boats, terminals, and related facilities and equipment. The program's goals are to address the critical backlog of state of good repair and safety investments and provide critical and cost-effective transportation links in urban areas throughout the United States.

Eligible projects are capital projects for the purchase, construction, replacement, or rehabilitation of ferries, terminals, related infrastructure, and related equipment, including fare equipment and communication devices. Projects are required to support a passenger ferry service that serves an urbanized area and may include services that operate between an urbanized area and non-urbanized areas. Ferry systems that accommodate cars must also accommodate walk-on passengers to be eligible for funding.

The funding agency will give priority consideration to applications that are expected to create significant community benefits relating to the environment, including those projects that incorporate low or no emission technology or specific elements to address greenhouse gas emissions and climate change impacts. The funding agency encourages applicants to demonstrate whether they have considered climate change and environmental justice in terms of the transportation planning process or anticipated design components with outcomes that address climate change (e.g., resilience or adaptation measures).

The funding agency encourages applicants to notify the appropriate state departments of transportation and metropolitan planning organizations (MPOs) in areas likely to be served by projects. Supported projects must be incorporated into long-range plans and transportation improvement programs of states and MPOs before they receive funding. The funding agency may take into consideration a project's consistency with or inclusion in such plans during the application evaluation process.

Applicant Eligibility

Eligible applicants are designated recipients of Section 5307 funds, states or regional authorities, and direct recipients of the Federal Transit Administration's Urbanized Area Formula Grants that operate a public ferry system in an urbanized area.

Funding

In FY 2022, an estimated \$36.5 million is available to support funding through this program. Of the total funding available, \$3.25 million is available only for low- or zero-emission ferries or ferries using electric battery or fuel cell components and the infrastructure to support such ferries.

Applicants must provide at least 15 percent of the net project cost for projects acquiring vehicles for purposes of complying with or maintaining compliance with the Clean Air Act (CAA) and/or the Americans with Disabilities Act (ADA) of 1990.



Applicants must provide at least 10 percent of the net project cost for projects acquiring, installing, or constructing vehicle-related equipment or facilities for purposes of complying with or maintaining compliance with the ADA or CAA.

Additional consideration will be given to projects for which local funds have already been made available or obligated within 12 months of award.

The project period for this program is five years.

Contact Information

FTA Office of Program Management FTAFerryPrograms@dot.gov Vanessa Williams (202) 366-4818 Sarah Clements (202) 366-3062

https://www.transit.dot.gov/grants/grant-programs/passenger-ferry-grant-program-section-5307h



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Port Infrastructure Development Program

Grant Overview

The Port Infrastructure Development Program (PIDP) provides funding to projects that will improve the safety, efficiency, or reliability of the movement of goods into, out of, around or within coastal seaports, inland river ports, and Great Lakes Ports. Eligible applicants are port authorities, commissions or their subdivisions, states, local governments, Tribal governments, public agencies, special-purpose districts with a transportation function, and multistate or multijurisdictional groups of entities.

Program History

	Total Funding	# of Awards
2021	\$241 million	25
2020	\$220 million	18

Key Information and Tips

Total Funding: \$450 million Award Range: At least \$1 million Match: 20 percent Solicitation date: February 14, 2022 Proposal due: May 16, 2022

• This program received additional funding for FY 2022 through the Infrastructure Investment and Jobs Act.

https://www.maritime.dot.gov/PIDPgrants



Awardee Profile

Brunswick, Georgia

AMOUNT: \$14.6 million Year: 2021

This project will address supply chain challenges by constructing a fourth roll-on/roll-off vessel berth at the Port of Brunswick's Colonel's Island Terminal in order to add needed capacity at the and more efficiently accommodate larger 7,000-plus-unit vehicle carrier vessels.



Department: U.S. Department of Transportation **Agency:** Office of the Secretary of Transportation

FY 2022 Port Infrastructure Development Program

Detailed Summary

The purpose of this program is to support infrastructure development for the improvement of port facilities and intermodal infrastructure-related projects. Projects should improve the safety, efficiency, or reliability of the movement of goods into, out of, around, or within coastal seaports, inland river ports, or Great Lakes ports.

Projects must be located either within the boundary of a port, or outside the boundary of a port, and directly related to port operations or to an intermodal connection to a port. Funds may be used for capital projects that will be used to improve the safety, efficiency or reliability of:

- The loading and unloading of goods at the port, such as for marine terminal equipment
- The movement of goods into, out of, around, or within a port, such as for highway or rail infrastructure, intermodal facilities, freight intelligent transportation systems, and digital infrastructure systems
- Operational improvements, including projects to improve port resilience
- Environmental and emissions mitigation measures; including projects for-
 - Port electrification or electrification master planning
 - o Harbor craft or equipment replacements or retrofits
 - Development of port or terminal microgrids
 - Provision of idling reduction infrastructure
 - o Purchase of cargo handling equipment and related infrastructure
 - Worker training to support electrification technology
 - o Installation of port bunkering facilities from ocean-going vessels for fuels
 - Electric vehicle charging or hydrogen refueling infrastructure for drayage and medium or heavy-duty trucks and locomotives that service the port and related grid upgrades
 - Other related port activities, including charging infrastructure, electric rubber-tired gantry cranes, and anti-idling technologies.

Applicant Eligibility

Eligible applicants are port authorities, commissions or their subdivisions, states, local governments, Tribal governments, public agencies, special-purpose districts with a transportation function, and multistate or multijurisdictional groups of entities. In addition, an eligible lead entity may apply jointly with a private entity or a group of private entities.



Funding

In FY 2022, up to \$450 million is available to support awards of at least \$1 million through this program. There is no maximum award size.

In general, the federal share of project costs may not exceed 80 percent, with the applicant providing the additional 20 percent of costs. The federal share may increase for a grant project that is located in a rural area or a grant awarded to a small project at a small port. Matching funds may originate from programs funded by state revenue, local funds originating from state- or local-revenue funded programs, or private funds.

No more than 25 percent of the total amount of funding available can be awarded to a single state. At least 25 percent of available funds is reserved for small projects at small ports.

Funding will be provided on a reimbursement basis.

Contact Information

Aubrey Parsons (202) 366-8047 <u>PIDPgrants@dot.gov</u>

https://www.maritime.dot.gov/PIDPgrants



Department: U.S. Department of Transportation **Agency:** Office of the Secretary for Transportation Policy

FY 2022 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

Grant Overview

Formerly known as the BUILD and TIGER grant programs, the RAISE Grant program supports surface transportation projects that will have a significant local or regional impact. Eligible applicants are state, local, tribal, and U.S. territorial governments, including special districts and public authorities with a transportation function, transit agencies, port authorities, and multi-state or multijurisdictional groups of eligible entities.

Program History

	Total Funding	# of Awards
2021	\$1 billion	90
2020	\$1 billion	70
2019	\$900 million	55

Key Information and Tips

Total Funding: \$1.5 billion Award Range: \$1 million - \$25 million (rural) \$5 million - \$25 million (urban) Match: 20 percent (urban) Solicitation date: January 28, 2022 Proposal due: April 14, 2022

 Priority will be given to projects that reduce greenhouse gas emissions, address environmental justice and racial equity to racial equity, and create good-paying jobs

https://www.transportation.gov/RAISEgrants



Awardee Profile

City of Manchester New Hampshire

amount: \$25,000,000 year: 2021

The City of Manchester received funding to reconnect the city's South Millyard district to surrounding neighborhoods and downtown Manchester, facilitating new, mixed-use development and adaptive redevelopment of existing buildings. The project will mitigate existing traffic congestion, increase driver and pedestrian safety, improve a critical rail crossing and freight mobility, and provide improved and accessible transportation options for the community.



Department: U.S. Department of Transportation **Agency:** Office of the Secretary for Transportation Policy

FY 2022 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

Detailed Summary

Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, the Rebuilding American Infrastructure with Sustainability and Equity, or RAISE Grant program, provides funding for surface transportation infrastructure that will have a significant local or regional impact. Supported projects should improve safety, economic strength and global competitiveness, equity, and climate and sustainability goals.

Eligible capital projects include but are not limited to:

- Highway, bridge, or other road projects eligible under title 23, United States Code
- Public transportation projects eligible under chapter 53 of title 49, United States Code
- Passenger and freight rail transportation projects
- Port infrastructure investments (including inland port infrastructure and land ports of entry)
- Surface transportation components of an airport project eligible for assistance under part B of subtitle VII of title 49, United States Code (see <u>Airport Improvement Program</u> Handbook Appendix P for details)
- Intermodal projects
- Projects to replace or rehabilitate a culvert or prevent stormwater runoff for the purpose of improving habitat for aquatic species while advancing the goals of the RAISE program
- Projects investing in surface transportation facilities that are located on Tribal land and for which title or maintenance responsibility is vested in the Federal Government
- Other surface transportation infrastructure projects that the Secretary considers to be necessary to advance the goals of RAISE such as public road and non-motorized projects that are not otherwise eligible under title 23, United States Code

Activities eligible for funding under RAISE **planning grants** are related to the planning, preparation, or design for example environmental analysis, feasibility studies, equity analysis, community engagement, and other preconstruction activities—of eligible surface transportation capital projects. Under the RAISE FY 2022 program, if an application includes right-of-way-acquisition, the project will be considered a capital project.

Eligible activities related to multidisciplinary projects or regional planning may include:

- Development of master plans, comprehensive plans, integrated land use and transportation plan, or corridor plans
- Planning activities related to the development of a multimodal freight corridor, including those that seek to reduce conflicts with residential areas and with passenger and non-motorized traffic



- Development of port and regional port planning grants, including State-wide or multi-port planning within a single jurisdiction or region
- Risk assessments and planning to identify vulnerabilities and address the transportation system's ability to withstand probable occurrence or recurrence of an emergency or major disaster

Research, demonstration, or pilot projects are only eligible if they will result in long-term, permanent surface transportation infrastructure that has independent utility.

Priority will be given to projects that:

- Reduce greenhouse gas emissions and are designed with specific elements to address climate change impacts
- Address environmental justice particularly for communities disproportionally experiencing climate change-related consequences
- Proactively address racial equity and barriers to opportunity including automobile dependence as a form of barrier
- Support the creation of good-paying jobs, including apprenticeships, with the free and fair choice to join a union and the incorporation of strong labor standards

Definitions

Urban/Rural: A project is designated as urban if it is located within (or on the boundary of) a Censusdesignated urbanized area that had a population greater than 200,000 in the 2010 Census. If a project is located outside a Census-designated urbanized area with a population greater than 200,000, it is designated as a rural project. A list of urbanized areas can be found <u>here</u>. Projects located in both an urban and rural area will be designated as urban if the majority of the project's costs are spent in urban areas and vice versa.

Areas of Persistent Poverty: A project is located in an Area of Persistent Poverty if:

- the County in which the project is located consistently had greater than or equal to 20 percent of the population living in poverty in all three of the following datasets: (a) the 1990 decennial census; (b) the 2000 decennial census; and (c) the 2019 Small Area Income Poverty Dataset; OR
- the Census Tract in which the project is located has a poverty rate of at least 20 percent as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR
- 3. the project is located in any territory or possession of the United States.

A list of all counties and census tracts that meet this definition can be found here.

Historically Disadvantaged Communities: Consistent with OMB's Interim Guidance for the Justice40 Initiative, a project is located in a Historically Disadvantaged Community if:

- 1. The project is located in certain qualifying census tracts, identified <u>here</u>;
- 2. The project is located on Tribal land; OR
- 3. The project is located in any territory or possession of the United States.

Access DOT's Historically Disadvantaged Communities Mapping Tool here.



Applicant Eligibility

Eligible applicants are states, local, tribal, and U.S. territorial governments, special purpose districts or public authorities with a transportation function, transit agencies, port authorities, and multi-state or multijurisdictional groups of eligible entities.

Recipients of previous RAISE/BUILD/TIGER grants may apply for funding to support additional phases of a project previous awarded funding through this program.

Funding

In FY 2022, an estimated \$1.5 billion is available to support awards of up to \$25 million through this program. For urban planning and capital projects, awards may not be less than \$5 million. For rural planning and capital projects, awards may not be less than \$1 million. Funding in FY 2022 has increased from previous years under the Infrastructure Investment and Jobs Act (IIJA) of 2021 to help meet overwhelming demand.

Funds are available for obligation only through September 30, 2026. All funds must be expended (the grant obligation must be liquidated or actually paid out to the grantee) by September 30, 2031.

Of the total funding available:

- At least 5 percent (\$75 million) will be awarded for planning, preparation, and design projects
- At least 1 percent (\$15 million) will be awarded for projects located in historically disadvantaged communities or areas of persistent poverty
- No more than 15 percent (\$225 million) may be awarded to projects in a single State
- No more than 50 percent (\$750 million) will be used for projects located in rural areas
- No more than 50 percent (\$750 million) will be used for projects located in urbanized areas

Applicants with projects located in urban areas must provide at least 20 percent of the total project costs nonfederal cash match. For projects located in rural areas, historically disadvantaged areas, and areas of persistent poverty the Federal share may be up to 100 percent of the cost. Non-Federal sources include State funds originating from programs funded by State revenue, local funds originating from State or local revenuefunded programs, or private funds. Applicants may also be allowed to use select federal funds as part of matching funds including tribal transportation program funds, TIFIA program funds, and Railroad Rehabilitation and Improvement Financing program funds.

Contact Information

Howard Hill 202-366-0301 <u>RAISEgrants@dot.gov</u>

https://www.transportation.gov/RAISEgrants



Department: U.S. Department of Transportation **Agency:** Office of the Secretary for Research and Technology

FY 2022 Strengthening Mobility and Revolutionizing Transportation (SMART) Grants

Grant Overview

The purpose of this new program is to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety. The program funds projects that are focused on using technology interventions to solve real-world challenges and build data and technology capacity and expertise in the public sector. The SMART Grants Program includes two stages: Stage 1 Planning and Prototyping Grants (Stage 1 grants) and Stage 2 Implementation Grants (Stage 2 grants). Eligible applicants include states, political subdivisions of a state, public transit agencies or authorities, public toll authorities, metropolitan planning organizations (MPOs), or a group of two or more eligible entities.

Program History

This is a *new* program funded through the Bipartisan Infrastructure Law.

Key Information

Total Funding: \$100,000,000 Award Range: Up to \$2,000,000 for Stage 1 Grants Match: Not required for Stage I Grants Solicitation date: September 19, 2022 Proposal due: November 18, 2022

https://www.transportation.gov/grants/SMART



Tips

- Applicants may only apply for Stage 1 Grants under this funding opportunity; an FY2023 SMART Grants Program is anticipated that will solicit applications for both Stage 1 and 2 grants.
- SMART will focus on building data and technology capacity and expertise for State, local, and Tribal governments.
- Eligible entities may choose to collaborate across different regions or geographies on projects with similar characteristics, addressing similar problems and with similar technologies, potentially sharing common resources such as partnerships with industry, nonprofits, academic institutions, or community foundations.

Department: U.S. Department of Transportation **Agency:** Office of the Secretary for Research and Technology

FY 2022 Strengthening Mobility and Revolutionizing Transportation (SMART) Grants

Detailed Summary

The purpose of the new SMART Grants Program is to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety. The program funds projects that are focused on using technology interventions to solve real-world challenges and build data and technology capacity and expertise in the public sector.

The SMART Grants Program includes two stages: *Stage 1 Planning and Prototyping Grants* (*Stage 1 grants*) and *Stage 2 Implementation Grants* (*Stage 2 grants*). The program structure is based on a belief that *planning, prototyping, and partnership are critical* to advancing the state of the practice for data and technology projects in the public sector. The funding agency anticipates that only recipients of Stage 1 Planning and Prototyping Grants will be eligible for Stage 2 Implementation Grants and anticipates funding projects of up to \$2,000,000 per project for Stage 1 and up to \$15,000,000 per project for Stage 2.

Stage 1 recipients should build internal buy-in and partnerships with stakeholders to refine and prototype their concepts, and report on results. Stakeholders can include public, private, academic, and nonprofit organizations; organized labor and workforce organizations; and community organizations and networks. At the conclusion of Stage 1, recipients should have the information to either create a fully realized implementation plan with robust performance metrics; or to make an informed decision not to proceed with the concept. Stage 1 results may uncover previously unknown institutional barriers, technical limitations, or poor performance relative to conventional solutions. The SMART Grants Program expects to document lessons learned from Stage 1 projects, knowing that these findings will be broadly beneficial to the transportation sector.

Stage 2 implementation projects should result in a scaled-up demonstration of the concept, integrating it with the existing transportation system and refining the concept such that it could be replicated by others. If demonstration at scale identifies critical challenges, gaps, or negative impacts, they should be clearly stated and documented so that other communities that take on similar projects can learn from them and adapt.

This funding opportunity solicits applications only for Stage 1 grants. The funding agency anticipates a FY23 SMART Grants Program solicitation for both Stage 1 and Stage 2 grant applications.

Projects funded by the SMART Grants Program use advanced data, technology, and applications to provide significant benefits to a local area, a State, a region, or the United States. These benefits are identified in Bipartisan Infrastructure Law (BIL) and align to the following categories:

• **Safety and reliability:** Improve the safety of systems for pedestrians, bicyclists, and the broader traveling public. Improve emergency response.

Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program

- **Resiliency:** Increase the reliability and resiliency of the transportation system, including cybersecurity and resiliency to climate change effects.
- **Equity and access:** Connect or expand access for underserved or disadvantaged populations. Improve access to jobs, education, and essential services.
- **Climate:** Reduce congestion and/or air pollution, including greenhouse gases. Improve energy efficiency.
- **Partnerships:** Contribute to economic competitiveness and incentivize private sector investments or partnerships, including technical and financial commitments on the proposed solution. Demonstrate committed leadership and capacity from the applicant, partners, and community.
- **Integration:** Improve integration of systems and promote connectivity of infrastructure, connected vehicles, pedestrians, bicyclists, and the broader traveling public.

The Department will prioritize SMART grants funding applications that demonstrate the following characteristics, identified in BIL:

- **Fit, scale, and adoption:** Right-size the proposed solution to population density and demographics, the physical attributes of the community and transportation system, and the transportation needs of the community. Confirm technologies are capable of being integrated with existing transportation systems, including transit. Leverage technologies in repeatable ways that can be scaled and adopted by communities.
- Data sharing, cybersecurity, and privacy: Promote public and private sharing of data and best practices and the use of open platforms, open data formats, technology-neutral requirements, and interoperability. Promote industry best practices regarding cybersecurity and technology standards. Safeguard individual privacy.
- Workforce development: Promote a skilled and inclusive workforce.
- **Measurement and validation:** Allow for the measurement and validation of the cost savings and performance improvements associated with the installation and use of smart city or community technologies and practices.

The SMART Grants Program funds multiple technology areas, as listed below. Projects *must* demonstrate at least one technology area and *may* demonstrate more than one technology area as outlined below:

- **Coordinated Automation:** the use of automated transportation and autonomous vehicles while working to minimize the impact on the accessibility of any other user group or mode of travel.
- **Connected Vehicles:** vehicles that send and receive information regarding vehicle movements in the network and use vehicle-to-vehicle and vehicle-to-everything communications to provide advanced and reliable connectivity.
- Intelligent, Sensor-Based Infrastructure: deployment and use of a collective intelligent infrastructure that allows sensors to collect and report real-time data to inform everyday transportation-related operations and performance.
- **Systems Integration:** integration of intelligent transportation systems with other existing systems and other advanced transportation technologies.
- **Commerce Delivery and Logistics:** innovative data and technological solutions supporting efficient goods movement, such as connected vehicle probe data, road weather data, or global positioning data to improve on-time pickup and delivery, improved travel time reliability, reduced fuel consumption and emissions, and reduced labor and vehicle maintenance costs.

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Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program

- Leveraging Use of Innovative Aviation Technology: leveraging the use of innovative aviation technologies, such as unmanned aircraft systems, to support transportation safety and efficiencies, including traffic monitoring and infrastructure inspection.
- Smart Grid: developing a programmable and efficient energy transmission and distribution system to support the adoption or expansion of energy capture, electric vehicle deployment, or freight or commercial fleet fuel efficiency.
- Smart Technology Traffic Signals: Improving the active management and functioning of traffic signals, including through:
 - Use of automated traffic signal performance measures;
 - Implementing strategies, activities, and projects that support active management of traffic signal operations, including through optimization of corridor timing; improved vehicle, pedestrian, and bicycle detection at traffic signals; or the use of connected vehicle technologies;
 - o Replacement of outdated traffic signals; or
 - For an eligible entity serving a population of less than 500,000, paying the costs of temporary staffing hours dedicated to updating traffic signal technology.

The funding agency seeks to award projects under the SMART Grants Program that address environmental justice, particularly for communities that disproportionally experience climate change-related consequences.

Applicants with projects that will be substantially executed within 18 months of when the grant is executed will be more favorably reviewed.

All award recipients will be required to provide performance data as part the grant agreement.

Eligible development and construction activities for grant funding are the following: planning; feasibility analyses; revenue forecasting; environmental review; permitting; preliminary engineering and design work; systems development or information technology work; acquisition of real property (including land and improvements to land relating to an eligible project); construction; reconstruction; rehabilitation; replacement; environmental mitigation; construction contingencies; and acquisition of equipment, including vehicles.

Applicant Eligibility

Eligible applicants include states; political subdivisions of a state such as cities, towns, counties, special districts, and similar units of local government, such as public port or airport authorities, if created under State law; public transit agencies or authorities; public toll authorities; metropolitan planning organizations, or a group of two or more eligible entities.

Eligible entities may choose to collaborate across different regions or geographies on projects with similar characteristics, addressing similar problems and with similar technologies, potentially sharing common resources such as partnerships with industry, nonprofits, academic institutions, or community foundations. If these entities choose not to apply as a group with a single lead applicant, they should identify their application as a collaborative application. Each organization in a collaborative application must submit an individual application. Collaborative applications can include any type of eligible entity. Each individual application in a collaborative application will be evaluated on its own merit sand USDOT reserves the right to fund all, some, or none of the associated applications, with the same anticipated funding (i.e., up to \$2,000,000 per individual award).

Funding

In FY 2022, a total of \$100,000,000 is available to support approximately 30 - 50 stage 1 awards of up to \$2,000,000 per award through this program. Cost sharing is not required. The expected period of performance for Stage 1 Grant agreements is expected to be 18 months.

Contact Information

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https://www.transportation.gov/grants/SMART



Department: U.S. Department of Transportation **Agency:** Build America Bureau

FY 2021 Transportation Infrastructure Finance and Innovation Act (TIFIA) Program

Grant Overview

The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program provides credit assistance to eligible applicants for large-scale, surface transportation improvements related to highway, transit, railroad, intermodal freight, and port access projects of regional and national significance. Eligible applicants are public and private entities seeking to finance, design, construct, own or operate an eligible project, including local governments, transit agencies, and special districts.

Program History

	Total Funding	# of Awards
2019	\$1.5 billion	4

Key Information and Tips

Total Funding: Unspecified Match: Varies by credit instrument Proposal due: Rolling

- Applicants will be responsible for fees associated with the program application that may be in excess of \$500,000
- Applicants may apply for both this program and the Railroad Rehabilitation and Improvement Financing (RRIF) Program

https://www.transportation.gov/buildamerica/programsservices/tifia



Awardee Profile

City of Chicago, LA; Chicago Department of Transportation

amount: \$99 million year: 2020

The City of Chicago received funding to continue the major initiative to improve the transportation along Wacker Drive, strengthen intermodal links, and establish a continuous pedestrian walkway along the south bank of the Chicago River. The Riverwalk is a planned public walkway along the banks of the Chicago River, connecting the lakefront with downtown Chicago.



Department: U.S. Department of Transportation **Agency:** Build America Bureau

FY 2021 Transportation Infrastructure Finance and Innovation Act (TIFIA) Program

Detailed Summary

The purpose of this program is to provide credit assistance to support large-scale, surface transportation improvements related to highway, transit, railroad, intermodal freight, and port access projects of regional and national significance. The program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital. Funding is intended to provide credit assistance using more advantageous terms than those available in the financial market, and to provide financing where it might not otherwise be possible. Specifically, credit assistance will be provided in the form of direct and secured loans, loan guarantees, standby lines of credit, and master credit agreements.

Projects may address the following categories of transit-oriented development:

- <u>Highway facilities:</u> eligible facilities include interstates, state highways, bridges, toll roads, international bridges or tunnels, and any other type of facility eligible for grant assistance
- <u>Transit:</u> eligible projects include the design and construction of stations, track, and other transitrelated infrastructure; purchases of transit vehicles; and any other type of project that is eligible for grant assistance
- <u>Rail:</u> projects involve the design and construction of intercity passenger rail facilities or the procurement of intercity passenger rail vehicles
- <u>Freight:</u> projects may address public freight rail facilities, private facilities providing public benefit for highway users by way of direct freight interchange between highway and rail carriers, intermodal freight transfer facilities, projects that provide access to such facilities, and service improvements (including capital investments for intelligent transportation systems)
- <u>Port:</u> projects are located within the boundary of a port terminal, provided that the project is limited to only such surface transportation infrastructure modifications as are necessary to facilitate direct intermodal interchange, transfer, and access into and out of the port
- <u>Rural</u>: eligible projects include surface transportation projects located outside of an urbanized area with a population greater than 150,000 individuals, or the capitalization of such projects within a state infrastructure bank (SIB)

Awards will also be provided to related transportation improvement projects grouped together in order to reach the minimum cost threshold for eligibility, as long as these individual components are eligible, and the related projects are secured by a common pledge.

Eligible costs include:



- Development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, permitting, preliminary engineering and design work, and other preconstruction activities
- Construction, reconstruction, rehabilitation, replacement, and acquisition of real property (including land related to the project and improvements to land); environmental mitigation; construction contingencies; and acquisition of equipment
- Capitalized interest necessary to meet market requirements, reasonably required reserve funds, capital issuance expenses, and other carrying costs during construction
- Capitalizing a rural projects fund
- Acquisition of real property and pre-award costs

Applicant Eligibility

Eligible applicants are public and private entities seeking to finance, design, construct, own, or operate an eligible project, including:

- State governments
- State infrastructure banks
- Transportation improvement districts
- Local governments
- Transit agencies
- Special authorities

- Special districts
- Railroad companies
- Private firms
- Consortia of companies specializing in engineering, construction, materials, and/or the operation of transportation facilities

Public-private partnerships are also eligible to submit letters of interest (LOIs) for this program, provided that they meet the requirements.

To be eligible, applicants must demonstrate relevant experience, strong qualifications, a sound project approach, and financial stability.

Funding

In FY 2021, an unspecified amount of funding is available to support credit instruments through this program. The total amount of credit assistance may not exceed 33 percent of the total of reasonably anticipated eligible project costs. Funding will be provided through the following types of credit instruments:

- <u>Secured/direct loans</u>: Loans will cover up to 49 percent of reasonably anticipated eligible project costs. Loans will have a maturity date of no later than 35 years after substantial completion of project or its useful life, whichever is less. Loan repayments may begin up to five years after substantial completion of the project.
- <u>Loan guarantees</u>: Guarantees will cover up to 49 percent of reasonably anticipated eligible project costs and will guarantee 80 percent of loans. Loan repayments may begin up to five years after substantial completion of the project. Requests for loan guarantees may be preferred over requests for the other credit instruments available.
- <u>Lines of credit:</u> Credit will cover up to 33 percent of reasonably anticipated eligible project costs. Credit may be used to supplement project revenues, if needed, during the first ten years of project operations, and will be available for up to ten years after substantial completion of the project. Lines



of credit may be combined with direct loans or loan guarantees for up to 49 percent of eligible project costs.

• <u>Master credit agreements:</u> Any master credit agreements awarded must satisfy the terms and conditions of the statutes of the relevant credit program.

The maximum maturity of all credit instruments provided through this program is the lesser of 35 years after a project's substantial completion, or the useful life of the project.

Eligible project costs must be at least \$50 million, with the following exceptions:

- Transit-oriented development (TOD) projects and local infrastructure projects: at least \$10 million
- Intelligent transportation system (ITS) projects: at least \$15 million
- Rural projects: at least \$10 million, but not to exceed \$100 million

Funds will be disbursed on a reimbursement basis as often as monthly, as eligible costs are incurred for the project. Generally, secured or direct loans may be prepaid in whole or in part, at any time, without penalty. For loan guarantees, prepayment features must be negotiated between the applicant and lender and must meet the approval of the funding agency. For lines of credit, full repayment is due no later 25 years after the end of the ten-year period of credit availability. The construction contracting process may begin no more than 90 days from the execution of the credit instrument.

The interest rate on a direct or secured loan will be equal to or greater than the yield on U.S. Treasury securities of comparable maturity on the date of execution of the credit agreement. The interest rate for loan guarantees must be negotiated between the applicant and the lender and must meet the approval of the funding agency. The interest rate for funds drawn on lines of credit will be equal to or greater than the yield on a 30-year U.S. Treasury security on the date of the execution of the credit line agreement.

Applicants must provide matching funds for this program. The required amount for the match will vary according to the requested type of credit instrument, as follows:

- Secured loans and direct loans: Applicants must provide at least 51 percent of reasonably anticipated eligible project costs
- Standby lines of credit: Applicants must provide at least 67 percent of reasonably anticipated eligible project costs
- Loan guarantees: Applicants must provide at least 51 percent of reasonably anticipated eligible project costs when loan guarantees are used with any other form of credit assistance, and the funding agency may not guarantee more than 80 percent of loan amounts

All loans requests for more than 67 percent of eligible project costs must provide a strong rationale.

Applicants will also be responsible for the following fees:

- Annual loan servicing fee: approximately \$13,000, indexed to inflation
- Advisors' fees: \$250,000 to be provided during the creditworthiness review, upon request of the funding agency
- Project monitoring fees: fee amount is not provided; fee will be charged in cases where the funding
 agency incurs costs in connection with monitoring the performance of a project, enforcement of
 credit agreement provisions, amendments to the credit agreement and related documents, and other
 performance-related activities



Applicants with project costs reasonably anticipated to be less than \$75 million may qualify for a waiver of advisors' fees.

Contact Information

Program Staff (202) 366-2300 BuildAmerica@dot.gov

https://www.transportation.gov/buildamerica/programs-services/tifia



Department: U.S. Department of Transportation **Agency:** Build America Bureau

FY 2022 Transportation Infrastructure Finance and Innovation Act (TIFIA): Rural Project Initiative (RPI)

Grant Overview

The Transportation Infrastructure Finance and Innovation Act (TIFIA): Rural Project Initiative (RPI) is aimed at helping to improve transportation infrastructure in rural communities by providing low-cost, fixed-rate, long-term loans for critical infrastructure projects. Eligible applicants are states, local governments, transit agencies, state infrastructure banks, private firms, special authorities, and transportation improvement districts.

Program History

There is no award history available for this program.

Key Information

Total Funding: Unspecified Award Range: \$10 million - \$100 million Match: 51 percent Proposal due: Rolling

https://www.transportation.gov/buildamerica/financing/tifia/tifiarural-project-initiative-rpi



Tips

- The application process for this program is the same as the general TIFIA program; applicants must submit a Letter of Interest (LOI) prior to submitting an application
- Projects must directly benefit rural communities that have a population of fewer than 150,000 and that are located outside a census-defined urban area

Department: U.S. Department of Transportation **Agency:** Build America Bureau

FY 2022 Transportation Infrastructure Finance and Innovation Act (TIFIA): Rural Project Initiative (RPI)

Detailed Summary

The purpose of this program is to improve transportation infrastructure in rural communities by providing low-cost, fixed-rate, long-term loans for critical infrastructure projects. Funding is intended to support transportation infrastructure that will improve the economy and the quality of life in rural areas. Eligible projects include:

- Roads, bridges, and tunnels
- Transit systems, including infrastructure, bus and train stations, and buses and passenger rail vehicles and facilities
- Intermodal connectors
- Pedestrian and bicycle infrastructure
- Freight transfer facilities
- Sea and inland waterway ports
- Airports, under certain circumstances

Applicant Eligibility

Eligible applicants are states and local governments; transit agencies; private entities; special authorities, such as government-sponsored corporations; transportation improvement districts; and state infrastructure banks.

Projects must directly benefit rural communities that have a population of fewer than 150,000 and that are located outside a census-defined urbanized area.

Funding

In FY 2022, an unspecified amount of funding is available through this program to support fixed interest rate loans for projects that range from \$10 million to \$100 million. Loan terms are up to 35 years, and interest rates are equal to one-half of the U.S. Treasury rate of equivalent maturity of the loan at the time of loan closing.

Applicants will be responsible for at least 51 percent of the total project costs, as loans are limited to 49 percent of project costs. Up to 80 percent of the project costs may be funded with federal funds, which may include funding from other federal programs. Application fees, often amounting to hundreds of thousands of



dollars, may be applicable; however, while funds last, the funding agency may pay these fees on behalf of the applicants for projects up to \$75 million.

Contact Information

Program Staff buildamerica@dot.gov (202) 366-2300

https://www.transportation.gov/buildamerica/financing/tifia/tifia-rural-project-initiative-rpi



Department: U.S. Department of Transportation **Agency:** Federal Aviation Administration

FY 2023 Voluntary Airport Low Emissions (VALE) Program

Grant Overview

The purpose of this program is to encourage airports to implement clean technology projects that improve air quality. This program will support eligible airports that meet their state-related air quality responsibilities under the Clean Air Act by helping airports finance low-emission vehicles, refueling and recharging stations, gate electrification, and other airport air quality improvements. Eligible applicants are sponsors of commercial service airports listed in the FAA's National Plan of Integrated Airport Systems (NPIAS) that are located in areas that are in non-attainment or maintenance of National Ambient Air Quality Standards (NAAQS).

Program History

	Total Funding	# of Awards
2021	\$36,242,834	12
2020	\$13,089,001	8
2019	\$13,527,305	7

Key Information and Tips

Total Funding: Unspecified Match: Varies by project costs Pre-Application Due: November 1, 2022

https://www.faa.gov/airports/environmental/vale/



Awardee Profile

Denver International Airport, CO

amount: \$8,738,112 year: 2021

This project received both discretionary and entitlement funding for the purchase and installation of 75 GPU and 81 PCA at various gates in Concourses A, B and C.



Department: U.S. Department of Transportation **Agency:** Federal Aviation Administration

FY 2023 Voluntary Airport Low Emissions (VALE) Program

Detailed Summary

The purpose of this program is to encourage airports to implement clean technology projects that improve air quality. This program will support eligible airports to meet their state-related air quality responsibilities under the Clean Air Act by helping airports finance low-emission vehicles, refueling and recharging stations, gate electrification, and other airport air quality improvements.

Eligible types of projects include:

- Alternative fuel vehicles
- Gate electrification
- Remote ground power
- Ground support equipment (GSE)
- Geothermal systems
- Solar thermal technologies
- Underground fuel hydrants

Award recipients must meet the following requirements:

- All equipment funded through this program must remain at the airport for its useful life
- Award recipients must track and maintain records of the use of equipment funded through this program
- Award recipients must maintain equipment funded through this program in use during the equipment's useful life, including replacing damaged or inoperable equipment

Eligible costs may include the fees associated with preparing the application and project engineering/design costs.

Applicant Eligibility

Eligible applicants are sponsors of commercial service airports listed in the Federal Aviation Administration's (FAA's) National Plan of Integrated Airport Systems (NPIAS) that are located in areas that are in nonattainment or maintenance of National Ambient Air Quality Standards (NAAQS).

For the purposes of this program, sponsors are defined as planning agencies, public agencies, or private airport owners/operators that have the legal and financial ability to carry out the requirements of this program.



Funding

In FY 2023, an unspecified amount of funding is available to support awards through this program. This program will provide funding through the FAA Airport Improvement Program (AIP), including AIP entitlement and discretionary funding, which provides grants to airports from the Aviation Trust Fund, and the Passenger Facility Charges (PFC) program, which approves locally imposed fees from airline passengers for eligible airport development.

In general, between 75 percent and 90 percent of total eligible project costs are reimbursable through this program for projects to be funded with Federal Aviation Administration (FAA) Airport Improvement Program (AIP) entitlement and discretionary funding. Applicants must provide the remainder of eligible project costs via nonfederal matching contributions, which may include eligible airport revenues, state or local grants, and Passenger Facility Charge (PFC) revenues.

Matching funds are not required for projects to be funded with PFCs.

In addition to providing monetary awards, this program will support projects to generate Airport Emission Reduction Credits (AERCs) that are recognized by the Environmental Protection Agency (EPA) and state air quality agencies. Eligible airports may use AERCs to meet future air emission regulation requirements for future capital projects.

Funding will be provided on a reimbursement basis. Awards will be issued before the end of federal fiscal year 2023. Awards for projects to be funded with FAA AIP entitlement and discretionary funding will be issued before the end of the federal fiscal year.

Contact Information

Dr. Jake Plante (202) 493-4875 jake.plante@faa.gov

Program Staff (202) 267-3263

https://www.faa.gov/airports/environmental/vale/



Department: U.S. Environmental Protection Agency **Agency:** Office of Transportation and Air Quality

FY 2022 Bipartisan Infrastructure Law: Clean School Bus Program

Grant Overview

This *new* program supports the replacement of existing school buses with clean and zero-emission school buses, which will result in cleaner air on the bus, in bus loading areas, and in the communities in which they operate. Eligible applicants are state and local governments that provide bus service, including public school districts; for-profits and nonprofits that have the capacity to sell clean school buses, zero-emission buses, charging or fueling infrastructure, related charging or fueling infrastructure to school bus owners, or arrange financing for such a sale; nonprofit school transportation associations; and tribes, tribal organizations, and tribally controlled schools that are responsible for the purchase of school buses or providing school bus service for a Bureau of Indian Affairs (BIA) funded school.

Program History

This is a new program funded by the Bipartisan Infrastructure Law, also known as the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: \$500 million Award Range: Varies Match: Not required Solicitation date: May 20, 2022 Proposal due: August 19, 2022

https://www.epa.gov/cleanschoolbus



Tips

- Priority will be given to high-need school districts and lowincome areas, rural school districts, and BIA-funded school districts and school districts that receive basic support payments under section 7703(b)(1) of title 20
- A list of priority applicants can be found <u>here</u>
- EPA will not fund multiple applications for bus replacements that will serve the same school district



Department: U.S. Environmental Protection Agency **Agency:** Office of Transportation and Air Quality

FY 2022 Bipartisan Infrastructure Law: Clean School Bus Program

Detailed Summary

The purpose of this program is to support the replacement of existing school buses with clean and zeroemission (ZE) school buses, which will result in cleaner air on the bus, in bus loading areas, and in the communities in which they operate. Clean school buses are defined as those that reduce emissions and are operated entirely or in part using an alternative fuel or are zero-emission buses. ZE school buses are defined as those that produce zero exhaust emission of any air pollutant and any greenhouse gas.

Program goals are to:

- Maximize number of clean and ZE school buses funded
- Prioritize school bus replacements in areas that have been historically underserved

Under this program a "school bus" is defined as a passenger motor vehicle designed to carry a driver and more than 10 passengers, that the Secretary of Transportation decides is likely to be used significantly to transport preprimary, primary, and secondary school students to or from school or an event related to school. Old buses being replaced must:

- Be vehicle model year 2010 or older diesel-powered school buses that will be scrapped if selected for funding, and be operational at the time of application submission. If a fleet has no eligible 2010 or older diesel school buses and is requesting zero emission school bus replacements, the fleet can either:
 - o Scrap 2010 or older non-diesel internal combustion engine buses; or
 - Scrap, sell, or donate 2011 or newer internal combustion engine buses
- Have a Gross Vehicle Weight Rating of 10,001 lbs or more
- Be operational at the time of application submission
- Have provided bus service to a public school district for at least 3 days/week on average during the 2021/2022 school year at the time of applying, excluding COVID-related school closures

All replacement school buses must:

- Have a battery-electric, CNG, or propane drivetrain
- Be EPA certified vehicle model year 2021 or newer
- Have a Gross Vehicle Weight Rating of 10,001 lbs or more
- Not be ordered prior to receiving official notification of selection for EPA funding
- Be purchased, not leased or leased-to-own
- Serve the school district listed on the application for at least five years from the date of delivery
- Meet federal safety standards and be maintained, operated, insured, registered, and charged/fueled according to manufacturer recommendations and state requirements



- Not be manufactured or retrofitted with, or otherwise have installed, a power unit or other technology that creates air pollution within the school bus, such as an unvented diesel passenger heater
- Not be purchased or otherwise subsidized with other federal funds. The total of CSB rebate bus funds and other eligible external funds allocated for the bus replacements cannot exceed the cost of the new buses.
- Upon request, be made available for inspection by EPA or its authorized representatives for 5 years from the date of delivery

Program funding for bus costs can also be used for driver/mechanic training, consulting on bus deployments, and bus warranties, if these services are provided through the bus dealer selling the bus and are clearly identified.

Applicants applying for replacement ZE school buses will, if selected, be allocated funding to be used for charging infrastructure installations. This can include but is not limited to charging equipment (such as AC Level 2 charging equipment or direct-current fast charging equipment), design and engineering, and installation costs such as trenching, wiring and electrical upgrades, labor, and permitting. All AC Level 2 charging infrastructure purchased under this program must be EPA ENERGY STAR certified chargers. The funding agency strongly recommends that all other charging infrastructure funded under this program be listed by a Nationally Recognized Testing Laboratory and that applicants consider long-term fleet electrical needs when installing charging equipment.

Applicant Eligibility

Eligible applicants are state and local governments that provide bus service, including public school districts; for-profits and nonprofits that have the capacity to sell clean school buses, ZE buses, charging or fueling infrastructure, or related charging or fueling infrastructure to school bus owners, or arrange financing for such a sale; nonprofit school transportation associations; and tribes, tribal organizations, and tribally controlled schools that are responsible for the purchase of school buses or providing school bus service for a BIA funded school.

Public charter schools with a National Center for Education Statistics District ID are eligible to apply directly for funding.

Prior to submitting an application, eligible for-profit and nonprofit entities and nonprofit school transportation associations must also notify and receive approval from the school district that would be served by buses purchased using rebates.

Applicants requesting funds for new school buses that will serve a school district and meets one or more of the prioritization criteria below will be offered more funding per bus and receive preference in the selection process. EPA offers equal prioritization for school districts that meet one or multiple of the following criteria:

- High-need school districts and low-income areas limited to:
 - School districts listed in the <u>Small Area Income and Poverty Estimates (SAIPE) School District</u> <u>Estimates for 2020</u> as having 20 percent or more students living in poverty
 - School districts not listed in the SAIPE data, including most charter schools, that self-certify as having 20 percent or more students living in poverty pursuant to the federal poverty threshold



- Rural School districts identified with locale codes "43-Rural: Remote" and "42-Rural: Distant" by the National Center for Education Statistics
- Tribal BIA funded school districts and school districts that receive basic support payments under section 7703(b)(1) of title 20 for children who reside on Indian land.

Funding

In FY 2022, approximately \$500 million will be made available to support an unspecified number of awards through this program. Of the total funding \$250 million will be made available for clean school buses and \$250 million will be made available for ZE school buses. The maximum rebate amount per bus is dependent on the bus fuel type, the bus size, and whether the school district to be served by the buses meets one or more of the prioritization criteria. The maximum rebate per bus is as follows:

- Buses serving school districts that meet one or more prioritization criteria:
 - <u>ZE Class 7+</u>: may receive a rebate up to \$375,000
 - <u>ZE Class 3-6</u>: may receive a rebate up to \$285,000
 - <u>CNG Class 7+</u>: may receive a rebate up to \$45,000
 - <u>CNG Class 3-6</u>: may receive a rebate up to \$30,000
 - <u>Propane Class 7+</u>: may receive a rebate up to \$30,000
 - <u>Propane Class 3-6</u>: may receive a rebate up to \$30,000
- Buses serving school districts that are not prioritized:
 - o <u>ZE Class 7+</u>: may receive a rebate up to \$250,000
 - <u>ZE Class 3-6</u>: may receive a rebate up to \$190,000
 - <u>CNG Class 7+</u>: may receive a rebate up to \$30,000
 - <u>CNG Class 3-6</u>: may receive a rebate up to \$20,000
 - Propane Class 7+: may receive a rebate up to \$20,000
 - Propane Class 3-6: may receive a rebate up to \$15,000

There are no stated matching requirements; however, applications that provide cost share through publicprivate partnerships, grants from other entities, or school bonds may be given priority. Awards of up to 100 percent of the cost of the replacement bus and charging or fueling infrastructure may be possible.

The maximum charging infrastructure amount per replacement ZE school bus for school districts that meet one or more prioritization criteria is \$20,000. The maximum charging infrastructure amount per replacement ZE school bus for school districts that are not prioritized is \$13,000.

Funding requests forms must be submitted to the funding agency from October 2022 to April 2023. The project period will end in October 2024.

Contact Information

Program Staff cleanschoolbus@epa.gov

https://www.epa.gov/cleanschoolbus



Department: U.S. Environmental Protection Agency **Agency:** Office of Air Quality Planning and Standards

FY 2022 Targeted Airshed Grant Program

Grant Overview

This program assists local, state, and tribal air pollution control agencies with developing plans and conducting projects to reduce air pollution in nonattainment areas that EPA determines are the top five most polluted areas relative to ozone, annual average fine particulate matter (PM_{2.5}), or 24-hour PM_{2.5} National Ambient Air Quality Standards. The overall goal of the Targeted Airshed Grant program is to reduce air pollution in the nation's areas with the highest levels of ozone and PM_{2.5} ambient air concentrations. Eligible applicants are local and state governments and Native American Tribes, and air pollution control agencies.

Program History

	Total Funding	# of Awards
FY 2020	\$56 million	10
FY 2019	\$50 million	3

Key Information and Tips

Total Funding: \$61.9 million Match: None Award Range: Up to \$8 million Solicitation date: October 12, 2022 Proposal due: December 8, 2022

• Priority will be given to projects that promote environmental justice

https://www.epa.gov/grants/2022-targeted-airshed-grantprogram-closed-announcement-fy-22



Awardee Profile

California Air Resources Board (CARB) – Nevada County, CA

year: FY 2020 award amount: \$2,460,653

Replace public-transit buses with zero-emission buses.



Department: U.S. Environmental Protection Agency **Agency:** Office of Air Quality Planning and Standards

FY 2022 Targeted Airshed Program

Detailed Summary

The purpose of this program is to reduce air pollution in the nation's areas with the highest levels of ozone and fine particulate matter (PM2.5) ambient air concentrations. Funding will assist local, state, and/or tribal air control agencies in developing plans and conducting projects to reduce air pollution in non-attainment areas that the Environmental Protection Agency (EPA) has determined are ranked as the top five mostpolluted areas relative to ozone (O3), annual average PM2.5, or 24-hour PM2.5 National Ambient Air Quality Standards (NAAQS).

The goal of this program is to fund emission-reduction activities in applicable non-attainment areas that will achieve documentable reductions of emissions that contribute to ozone and/or PM2.5 concentrations. Projects should include detailed, well-thought-out emission-reduction activities, including projects, programs, policies, approaches, and/or deploying technologies that achieve documentable emission reductions. Projects must be for emission-reduction activities that will assist with attaining and/or maintaining the NAAQS for these pollutants, and that demonstrate the potential for inclusion in the affected jurisdiction's state implementation plan (SIP) or tribal implementation plan (TIP) submission to EPA intended to meet or maintain those standards.

Projects should address priority emission sources and emission-reducing activities that generate measurable, quantitative reductions of ozone, PM2.5, and/or precursor air emissions in the applicable non-attainment area. Project types may include:

- <u>Replacement or retrofit projects:</u> projects should remove an inefficient, higher-polluting device and upgrade it with a cleaner device or technology, which may include mobile on- and nonroad vehicles, engines or equipment, or heat devices
- <u>Projects involving heat devices or mechanisms:</u> replacing inefficient, higher-polluting devices providing heat with cleaner, lower-polluting, more-efficient devices
- <u>Demonstration projects</u>: projects that involve new or experimental technologies, methods, or approaches where the results of the project will be disseminated so that others can benefit from the knowledge gained

Applicant Eligibility

Eligible applicants are air pollution control agencies, as defined in section 302(b) of the Clean Air Act (CAA), that:

- Have submitted a state implementation plan (SIP) or tribal implementation plan (TIP) to the funding agency to attain and/or maintain the National Ambient Air Quality Standards (NAAAQS) for one or more of the non-attainment areas listed below
- Have an active air program award under section 103 or 105 of the CAA to carry out those responsibilities



Projects must take place in the following non-attainment areas that the Environmental Protection Agency (EPA) has determined are ranked as the top five most-polluted areas relative to ozone (O3), annual average fine particulate matter (PM2.5), or 24-hour PM2.5 relative to the National Ambient Air Quality Standards (NAAAQS):

Ozone:

- Los Angeles South Coast Air Basin (CA)
- Morongo Band of Mission Indians (CA)
- San Joaquin Valley (CA)
- Los Angeles and San Bernardino counties/West Mojave (CA)
- Riverside County/Coachella Valley (CA)

PM2.5 (annual standard):

- San Joaquin Valley (CA)
- Plumas County (CA)
- Los Angeles South Coast Air Basin (CA)
- Allegheny County (PA)
- Imperial County (CA)

PM2.5 (24-hour standard):

- Fairbanks (AK)
- Klamath Falls (OR)
- San Joaquin Valley (CA)
- Sacramento (CA)
- Los Angeles South Coast Air Basin (CA)

Funding

In FY 2022, approximately \$61.9 million is expected to be available to make between 8-13 grants or cooperative agreements of up to \$10 million through this program.

The project period is estimated to begin in April 2023, and may last for up to five years.

Matching funds are not required for this program; however, applicants may include voluntary matching funds or leveraged resources in the application. The project period may last for up to five years.

Contact Information

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https://www.epa.gov/grants/2022-targeted-airshed-grant-program-closed-announcement-fy-22